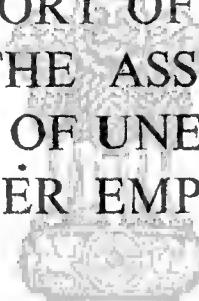




**GOVERNMENT OF INDIA  
COMMITTEE ON UNEMPLOYMENT**

**REPORT OF THE  
PANEL ON THE ASSESSMENT OF  
THE EXTENT OF UNEMPLOYMENT  
AND UNDER EMPLOYMENT**



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**VIGYAN BHAVAN ANNEXE,  
NEW DELHI, NOVEMBER, 1972**

## MEMBERS OF THE PANEL

1. DR. ASHOK MITRA, Chief Economic Adviser, Department of Economic Affairs, Ministry of Finance, and Member of the Committee . . . . . *Chairman*
2. DR. GAUTAM MATHUR, Professor, Osmania University, and Member of the Committee . . . . . *Member*
3. SHRI A. CHANDRA SEKHAR, Registrar General, India, Ministry of Home Affairs, New Delhi . . . . . *Member*
4. SHRI S. C. CHAUDHRI, Chief Executive Officer, National Sample Survey Organisation, Government of India, New Delhi . . . . . *Member*
5. SHRI H. R. SHARMA, Director, Statistics & Coordination, Committee on Unemployment, New Delhi. . . . . *Secretary*

### **Special Invitees**

1. DR. J. N. SINHA, Senior Fellow, Indian Institute of Economic Growth, Delhi
2. DR. J. KRISHNAMURTHI, Lecturer, Delhi School of Economic, Delhi

*N. B.— 1. Dr. Ashok Mitra ceased to be Chief Economic Adviser with effect from 16th July, 1972, but continued to be a member of the Committee and Chairman of the Panel.  
2. Dr. Gautam Mathur could not attend the meetings of the Panel.  
3. Dr. J. N. Sinha attended meetings of the Panel upto December, 1971.  
4. Dr. J. Krishnamurthi attended the meetings of the Panel upto August, 1972.*

### **Acknowledgements**

The Panel would place on record its gratitude to the organisations which have furnished information, data, reports on research studies, etc. and its appreciation for the contributions made by the special invitees to the deliberations and also for the assistance received from the secretariat.

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**REPORT  
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## SECTION-I

### INTRODUCTION

1.1 The Committee on Unemployment, at its meeting held on 17th June, 1971, considered the first term of reference for the Committee, including the recommendations of the Committee of Experts on Unemployment Estimates under the chairmanship of Prof. M. L. Dantwala, the work of the Inter-Departmental Committee, the work done by the Working Group on Concepts and Definitions appointed by the Central Statistical Organisation, the studies having bearing on the assessment of unemployment in the country undertaken by different agencies in the past and proposed to be undertaken in the near future. The Committee felt that it would be useful if a Panel was constituted to review in detail the subjects covered under the first term of reference set for the Committee. Accordingly, on 26th July, 1971, a Panel under the chairmanship of Dr. Ashok Mitra and consisting of Dr. Gautam Mathur\*, Shri A. Chandra Sekhar and Shri S. C. Chaudhri was constituted; the Panel was also asked to cover the subjects referred to in the fifth term of reference. The Panel was authorised to co-opt from time to time such persons from outside as they may consider necessary. The Panel invited Dr. J. N. Sinha of the Institute of Economic Growth, Delhi and Dr. J. Krishnamurthi of the Delhi School of Economics to participate in the meetings of the Panel as special invitees.

1.2 Between August, 1971 and September, 1972 the Panel held eight meetings to consider the first and the fifth terms of reference set for the Committee and make recommendations thereon for submission to the Committee. The Panel considered working papers and memoranda prepared by the secretariat, based on material consisting of reports and publications on the subject, published data, data collected by the secretariat through questionnaires, data made available through the Population Census of 1971 and those collected by the National Sample Survey Organisation, information from the employment exchanges and Employment Market Information and reports on research studies sponsored by the Committee on Unemployment. The views of the Panel are placed in Sections II to V of the Report.

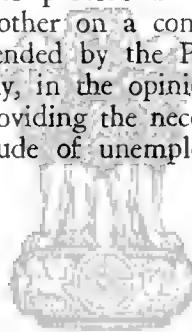
1.3 In these sections, the Panel has endeavoured to present as full a picture as is possible on different sets of data at present available on the state of employment and unemployment in the country. It would be extremely difficult, in the opinion of the Panel, to develop a composite picture of the aggregate level of unemployment on the basis of current data. The quality of the data is uneven and the comparability

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\*Dr. Mathur has been unable to attend the meetings of the Panel.

as between different sets of data is largely vitiated. Partly this is also the consequence of different concepts having been used in defining the relevant 'categories'. While, under certain circumstances and under given assumptions, it may be possible to use the available data over a period for assessing the extent of relative shifts in the incidence of unemployment, little can be said about its absolute incidence at any particular point of time.

1.4 The Panel does not feel it necessary to deploy disproportionately large resources in search of precise data in this area. It is in the nature of the Indian economy that unemployment often assumes a disguised form, and given the disparate levels of social, economic, cultural and educational developments, it would be in the nature of a will-o'-the wisp to try to have precise measures of the various forms of unemployment in different parts of the country. It would be worthwhile, the Panel feels, to await the detailed results of the 27th round of the National Sample Survey and of the subsequent rounds which could be expected to provide a larger volume of systematic data, comparable to each other on a continuous basis. The permanent commission, recommended by the Panel in the context of the fifth term of reference may, in the opinion of the Panel, operate as a continuing agency for providing the necessary guidance for assessing the incidence and magnitude of unemployment in terms of agreed concepts and measures.



## SECTION-II

### Recommendations of the Dantwala Committee and Action Thereon

2.1 The Resolution of the Government stipulates that the Committee should carry out an assessment of the extent of unemployment and under-employment in all its aspects, taking into account the recommendations made by the Committee of Experts on Unemployment Estimates set up by the Planning Commission under the Chairmanship of Prof. M. L. Dantwala. The Dantwala Committee (1968-1970) was required to study the estimates of unemployment worked out for the previous Plans and the data and methodology used for arriving at them and advise the Planning Commission on various issues connected therewith, in particular, the alternative methods of analysis, computation and presentation that may be adopted for the Fourth Five Year Plan (1969-74) in the 10-year perspective of 1969-79. The operational recommendations of the Dantwala Committee\* are briefly summarised below:—

#### Observations and Recommendations Regarding Methodology

2.2.1 The desire on the part of the lay public for precise estimates on the vital problem of employment and unemployment is appreciated. It should, however, be made clear that the precision of the order asked for is not always possible. Many of the limitations of the estimates of labour force, employment and unemployment are inherent in the socio-economic conditions of the country and cannot be wholly overcome by conceptual refinements or improvements in the techniques of estimation. This, however, should not be an excuse for neglecting the task of compiling and presenting the relevant data as intelligently and precisely as is possible under the circumstances.

2.2.2 The concept of labour force is basic to the issue of unemployment. The concept as adopted in developed economies is unsuitable for an economy like ours, the main problem being that a sizeable proportion of labour input in the household enterprises is provided by some members of the family who have only a partial attachment to the labour market. They work in family enterprises without receiving any wages as and when required. In that situation, they become part of the labour force. When there is no such work, they generally revert to household work. Their inclusion in labour force is misleading but their exclusion is also equally unrealistic.

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\*Report of the Committee of Experts on Unemployment Estimates Planning Commission, Govt. of India, 1970.

2.2.3 In an economy like ours, there would be little outright unemployment, but there would be considerable seasonal unemployment and/or underemployment. The distinction between these two features should be clearly recognised and it may not be appropriate to aggregate the estimates pertaining to underemployment into estimates of full-time unemployment. Not only are the two phenomena analytically distinct, the remedial action needed for each of them is also quite different. The planning authorities should, therefore, distinguish clearly between the overtly unemployed and underemployed and attempt separate estimates of the two categories. Further, the question of extent of underemployment is important but its measurement solely in terms of man-years appears to be inappropriate.

2.3 In the context of the Indian economy, the character of the labour force, employment and unemployment is too heterogenous to justify aggregation into single dimensional magnitudes. It was, therefore, recommended by the Dantwala Committee that :

- (a) segments of the labour force should be estimated separately, taking into account such important characteristics as region or state, sex, age, rural or urban residence, status or class of worker and educational attainments;
- (b) the demand likely to be generated for particular categories of labour as a result of various developments envisaged under the Five-Year Plans be identified initially for sectors where the personnel or labour requirements can be clearly recognised;
- (c) at the end of each Plan, the official estimates should be compared with the actual employment created and the reasons for the difference, if any, should also be identified; and
- (d) meanwhile, detailed studies should be made continuously to prepare more precise estimates of employment generated in other sectors of the economy.

## II. Concepts and Definitions of Employment and Underemployment

2.4 Based on the above considerations, the Dantwala Committee made a number of suggestions for improvements, in the data collected through the Decennial Census of population, surveys by the NSSO, employment market information and employment exchange data. Some of these suggestions pertained to the concepts and definitions followed in studies on employment, unemployment and underemployment, their inadequacy under certain situations and the need for a thorough examination for evolving more purposeful and practical concepts and definitions. In pursuance of the recommendations of the Dantwala Committee, an inter-departmental committee was set up under the Employment Commissioner to suggest follow-up action.

As a part of this follow-up action, empirical studies were suggested by the inter-departmental committee. It was felt by the Committee that in the absence of clear concepts and definitions for unemployment, underemployment and employment, it was virtually impossible to produce any statistics which would give reasonably accurate estimates of the different aspects of the problem.

2.5 The Panel has gone into the details of the concepts and definitions used or recommended by different agencies in the collection of data on employment, unemployment and underemployment. Also the efforts made to evolve suitable concepts and definitions for Indian conditions have been reviewed. In the course of the examination of the data from different sources by the Panel, evidence has come to notice which has bearing on the adequacy or otherwise of certain concepts already in vogue. While reviewing the research studies carried out by different agencies, the concepts and definitions used in those studies have been specifically examined. The concepts and definitions used in some of the typical studies are brought together and included in an annexure to this Section. The concepts and definitions used in two important sources of data in the country, namely, the Decennial Census of population and the National Sample Survey are discussed in detail in the following paragraphs. In addition, the recommendations of the International Labour Organisation and the efforts made by the CSO and the National Sample Survey Organisation in evolving suitable concepts and definitions are examined. The latest suggestions and recommendations in this regard are given in detail. In a few instances, the empirical evidence has been examined to bring out the inadequacy of some of the concepts and to point out the lines for further work. The Panel has reviewed the situation in this regard in the context of the work of the Committee on Unemployment and its observations are given with reference to the needs of manpower planning and study of employment as envisaged in the recommendations of the Panel on the fifth term of reference.

#### **Concepts and Definitions followed by Various Agencies**

##### *International labour organisation :*

2.6.1 The ILO\* has defined the term "employed" and 'unemployed' as follows :—

"The 'employed' should include all persons who work on their own account or are in the employment of others. The employed should thus include employers, persons who are self-employed

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\*Employment and Unemployment, Labour Force Statistics—Study of Methods  
I.L.O., Geneva, 1948.

(i.e. who work on their own account), salaried employees, wage earners and unpaid family workers who are engaged in tasks directly related to operation of a family enterprise for a minimum of at least one-third of the normal working time during the specified period of a week, not including hours spent in unpaid domestic work. The 'employed' should include persons in labour camps if they are free to seek alternative employment, but should not include persons in such camps who are not free to make that choice; or persons confined to prisons or similar institutions. Persons who are directly employed by any public authority or emergency public relief work should also be included in the statistics of the employed but where such persons are employed under conditions inferior to those of regular public employees engaged in the same type of work, their number should be indicated separately."

2.6.2 "The 'unemployed' should include all persons seeking work on a given day, who are not employed but are able to take a job if offered one."

2.6.3 "Labour force should include all 'employed' as well as 'unemployed persons', as defined above, together with the armed forces. The Civilian Labour Force should include all employed and unemployed persons exclusive of the armed forces."

2.7 In the above definitions no mention has been made about the hours of work or income required to classify an 'on own account' worker, employer or employee as engaged in full time work. Seasonal employments, too, have not been considered. The concept of underemployment which is a unique characteristic of majority of workers in rural areas in the country has not been dealt with at all. Thus, the concepts propounded may be all right for certain countries with organised economies but they cannot be used in assessing unemployment and underemployment in this country.

2.8 The ninth International conference of labour statisticians in a resolution made the following observations about the "Underemployment".

"Underemployment exists when persons in employment who are not working full time would be able and willing to do more work than they are actually performing, or when the income or productivity of persons in employment would be raised if they worked under improved conditions of production or transferred to another occupation, account being taken of their special skills".

The resolution\* mentions in particular two categories of underemployment, viz.,

- (a) Visible underemployment, which involves shorter than normal periods of work and which is characteristics of persons involuntarily working part-time.
- (b) Invisible underemployment which is characteristics of persons whose working time is not abnormally reduced but whose earnings are abnormally low or where jobs do not permit full use of their capacities or skills (sometimes called disguised unemployment) or who are employed in establishments of economic units where productivity is abnormally low (sometimes called potential underemployment).

*Central statistical organisation :*

2.9 Vide 'Standards For Surveys on Labour Force Employment and Unemployment' (June, 1961), the CSO\*\* recommended distinct sets of definitions of 'employment' and 'unemployment' for rural and urban sectors keeping in view the significant differences that exist between the characteristic features of the two sectors. In view of the existence of an organised labour market and predominance of paid jobs of a more or less regular nature in urban areas, the following definitions were adopted :—

(1) *Employed*.—This category consists of :

- (i) all persons who had worked for pay or profit on at least one day during the reference week on economic activity;
- (ii) all persons who had jobs or own enterprises, professions or vocations, but were temporarily absent from work during the reference week for reason of illness, injury or other physical disability, bad weather strike or lock-out, paid vocation for rest or recreation, or any other causes including social or religious, necessitating temporary absence from work; and
- (iii) unpaid helpers, who had assisted in the operation of an economic activity on at least one day during the reference week.

Paid apprentices are included under (i) or (ii) as the case may be depending on whether they worked during the week or not and unpaid apprentices are included under (iii).

(2) *Unemployed*.—This category consists of all persons who, having no paid job, or enterprise of their own had not worked even on a

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\*Report of the Ninth International Conference of Labour Statisticians, I.L.O. Geneva.

\*\*Standard for Surveys on Labour Force Employment and Unemployment Central Statistical Organisations, Cabinet Secretariat, 1961.

single day during the reference week and were currently looking for full time work. It includes :

- (i) Persons whose employment or means of self-employment were discontinued, whether temporarily, indefinitely or permanently, (except for such reasons as mentioned in the definition of sub-category (ii) of the employed category); and
- (ii) Persons who were looking for work for the first time.

But it excludes persons who have not completed 14 years of age and those who have completed 60 years of age or more. The under-mentioned persons are to be regarded to be looking for work :—

- (a) Those who are on the live register of the employment exchanges at the end of the reference week.
- (b) Those who had put in a written application for a job, during the two months preceding the end of the reference week and were awaiting the results of the application.
- (c) Those who had contacted prospective employers at least once during the reference week for employment.
- (d) Those who could not contact prospective employers during the reference week because of ill health, disability, bad weather or other similar reasons provided they had contacted them for jobs before the contingency and in any case within the preceding two months.
- (e) Those who did not make any tangible efforts to secure employment as per (a) to (d) above under an expectation of recall to jobs which they had temporarily left or under the belief that no alternative opportunities existed in the locality or to other similar reasons and that could not be helped.

(3) *Not in the labour force*.—All persons not classifiable either as ‘employed’ or ‘unemployed’ according to the above definitions are automatically to be categorised as not in the labour force. They may consist of :—

- (a) persons below the age of 14 and above the age of 60 not already in employment; and
- (b) students, housewives, pensioners, non-working proprietors rentiers, beggars and others not already in employment and not currently looking for work.

2.10 The CSO\* adopted the following criteria for “full time work” : “Full-time means the normal time hours of work for the type of work (occupation) looking for and may differ from occupation to occupation. In case of doubt, six hours or more per day may be considered as full time.”

2.11 In respect of under-employment the definitions laid down by the Ninth International Conference of Labour Statisticians were adopted, i.e.,

- (a) Visible under-employment which involved shorter than normal period of work and which is characteristic of persons involuntarily working part-time.
- (b) Invisible under-employment which meant that the worker was not having adequate earning from his employment although he had full time work.

2.12 *For rural sector.*—The CSO\* suggested the term ‘working’ instead of ‘employed’ and laid down the following definitions for the rural sector.

(A) Working :—

- (i) All persons who had worked for pay or profit on at least one day during the reference week on some economic activity;
- (ii) all persons who despite availability of work had abstained from work during the reference week for reasons of illness, injury or other contingencies necessitating temporary absence from the work; and
- (iii) unpaid helpers who had assisted in the operation of an economic activity, of their household on at least one day during the reference week.

(B) Available for work :—

All persons who had not worked even on a single day during the reference week and were currently available for work are categorised as ‘available for work’. They include :

- (i) persons seeking work through employment exchanges, intermediaries, applications or direct contacts; and
- (ii) persons not seeking work but available for work at current rates of remuneration in prevailing conditions of work.

(C) Economically Inactive Persons :—

All persons who were not classifiable either as ‘Working’ or ‘Available for work’ according to the above definitions were categorised as ‘economically inactive’.

2.13 In case of urban as well as rural sectors the definitions imply the following order of priority in the classifications :—

First : employed/working.

Second : unemployed/available for work.

Third : not in labour force/economically inactive.

\*Standard for Surveys on Labour Force, Employment and Unemployment, Central Statistical Organisation, Cabinet Secretariat, 1961.

2.14 The CSO recommended the period of a week preceding the date of Survey for collecting data pertaining to employment, unemployment and uneconomic activities. For measuring visible under-employment, too, the reference period was suggested as 'Week' in the above sense and it was to be done in terms of days and hours. In this connection, the CSO has cautiously observed, "the sample may be staggered uniformly over a year, but the results obtained by too short a period like a week are likely to be of limited value."

2.15 *National Sample Survey*.—From 16th round (July, 1960-June, 1961) the concepts embodied in the manual entitled 'Standards for Surveys of Labour Force' CSO (1961) mentioned in the fore-going paragraphs have been used with the object of :

- (i) making a quantitative assessment of visible and other unemployment prevalent in the country;
- (ii) Finding out statistical measure for the nature and magnitude of under-employment; and
- (iii) getting a picture of the pattern of employment in all its facets.

2.16 From 17th round (Sept., 1961-July, 1962) separate schedules for rural labour force survey were discontinued. Data on employment and unemployment were collected in the later rounds through an integrated household schedule using the same concepts in rural areas as in urban areas. Besides, a survey on urban labour force was also conducted in 20th, 21st and 22nd rounds.

2.17.1 In the twenty-sixth round, too, uniform concepts\* have been used for rural as well as urban areas.

The employed have been sub-divided into the following categories :—

- (i) *Employer*.—One who hires one or more persons to assist him in operating his enterprise.
- (ii) *Employee*.—One who does work for a public or private organisation, an individual or a group of persons and receives remuneration in the form of wages salary or pay in kind or in cash.
- (iii) *Own account worker*.—One who runs his own enterprise without employing any one on salary or wages. However, an unpaid family enterprise worker may be working in the same enterprise.

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\*National Sample Survey—Twenty-sixth round, July, 1971–June, 1972—  
Instructions to Field Staff—Vol. I, Concepts, Definitions and Procedures,  
Indian Statistical Institute, Calcutta.

(iv) *Unpaid household worker.*—One who works in the enterprise run by another member of his household without being paid in cash or kind.

2.17.2 The unemployed have been sub-divided into two categories :—

- (a) *New entrants.*—Persons not having any gainful employment usually who are looking for work for the first time.
- (b) Other unemployed.

2.17.3 Only the dominant status on the basis of the time criterion has to be recorded. Gainful employment gets preference over unemployment and similarly unemployed over 'not in labour force' category while classifying the individuals.

2.17.4 In the rural sector as per definition adopted the unemployed include not only those who are actively seeking but also those who are simply willing to take up additional work if made available. The usual status has been used but it does not provide any picture of seasonal unemployment or inactivity.

2.18 In the light of the experience in the recent past by various research organisations and research workers about the inadequacy of the concepts and definitions, two pioneering attempts were made by the Central Statistical Organisation/NSS—one to conduct a pilot study for evolving suitable concepts and definitions in urban areas and the other to work out an alternative framework for the conduct of rural labour force surveys as may be practical and useful for Indian conditions. The details of the pilot study are briefly summarised in the following paragraphs :

2.19 This pilot study on employment and unemployment in urban areas of India was conducted by the National Sample Survey during the period March, 1969 to March, 1970. The objectives of the study were the following :—

- (i) Evaluation of the suitability of the various concepts and definition on labour force surveys including those currently in use in National Sample Survey by comparing the estimates based on the NSS approach with those obtained by the revised approach where in the concepts and definitions are not pre-determined; and
- (ii) Evolution of suitable concepts and definitions for classifying the population into various categories such as employed, unemployed and outside the labour force.

2.20 It was decided to collect data on labour force through the pre-determined approach already practised in the NSS on the basis of the existing concepts and definitions as well as the open approach, the data being collected in two separate schedules called U and P respectively. The schedule U of the pilot study was canvassed in the States of Uttar Pradesh, West Bengal and Madras. In each case a sample of 24 blocks spread over 4 towns having approximately equal population and similar economic pattern was selected in the first stage. In the second stage, two linked inter-penetrating samples of 102 households were selected systematically, one for schedule U and the other for schedule P after arranging the households in two strata. All households having one or more own-account worker or employer formed the first stratum and the remaining households formed the second stratum.

2.21 In this study, the method of collecting data on labour time disposition for a period of one week during each of the 12 successive months attempted to reveal the case history of an individual over a period of one year. It also indicated the attachment of the individual to an activity or occupation and the pattern of mobility between activities or occupations over the year. This method has thrown up data on different aspects of employment, unemployment and under-employment which are very helpful in bringing out the inadequacy of the approach used hitherto and in evolving realistic, practical and accurate concepts and definitions to suit local conditions. The results are readily available only for the first six months of the study pertaining to the hitherto practised approach and those for the revised one are still awaited. By way of illustration, a few results are quoted below :—

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TABLE-I

*Percentage of population seeking gainful work, by sex and month of investigators visit*

*(Based on information collected in Schedule U)\**

Month	WEST BENGAL			TAMIL NADU			UTTAR PRADESH		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1.	1.13	0.98	1.06	1.39	0.20	0.80	0.53	—	0.29
2.	0.95	0.97	0.96	2.26	0.63	1.45	0.55	0.22	0.40
3.	1.15	0.78	0.96	3.34	0.42	1.88	0.93	—	0.50
4.	0.76	0.76	0.76	2.17	0.43	1.30	1.13	—	0.60
5.	0.97	0.56	0.76	2.12	0.90	1.01	1.32	0.22	0.80
6.	0.56	0.76	0.66	2.74	0.84	1.79	0.86	—	0.46

\*The National Sample Survey—Report No. 228—A Preliminary Report on the Pilot Study on Employment and Unemployment in Urban Areas, issued by the Cabinet Secretariat, Government of India, 1969.

TABLE-2\*

*Percentage distribution of population by present activity, age group and sex (Based on information collected in Schedule U)*

Age Group	Vellore		Meerut		Krishnagar			
	Seeking Gainful Work		Employed other than Unpaid Helper		Seeking Gainful Work		Employed other than unpaid Helper	
	% Male	% Female	% Male	% Female	% Male	% Female	% Male	% Female
0-9	.	.	.	.	5.93	..	19.25	..
10-14	.	.	..	..	1.95	..	7.28	..
15-19	.	.	22.73	83.33	12.81	50.00	12.40	3.85
20-24	.	.	31.82	..	13.93	12.71	50.00	10.24
25-29	.	.	18.18	16.67	6.96	16.95	..	16.17
30-39	.	.	27.27	..	28.13	38.98	..	100.00
40-49	.	.	..	..	21.73	11.02	..	18.06
50-59	.	.	..	..	12.26	6.78	..	10.78
60 & above	.	.	..	..	2.23	7.63	..	10.51
Not recorded	.	.	..	..	..	..	..	..
All	.	100.00	100.00	100.00	100.00	100.00	100.00	100.00

\* National Sample Survey—Report No. 228—A preliminary Report on Pilot Study on Employment and Unemployment.

2.22 A perusal of the above table will show that during the first six months of the year of survey in all the three selected states, there was variation in the percentage of population seeking gainful work in different months. This bring out the inaccuracy of the data on unemployment based on current status during the reference period of a week.

2.23 The following table indicates the age distribution of persons employed as other than unpaid helper and those seeking gainful work as observed during the above-mentioned study.

2.24 It will be observed from the table that age-groups 10-14 and 60 and above are also significant and should not be excluded from the computations in respect of the labour force.

2.25 The second important attempt by the CSO/NSSO referred to above related to the working out of the details for evolving suitable concepts and definitions for employment, unemployment and under employment in rural areas of the country. The surveys of labour force conducted by the National Sample Survey and some other organisations followed in the past concepts and definitions laid down by the CSO in 1971 as discussed above.

2.26 In view of the criticism against these concepts and definitions that these may be more relevant to the advanced countries, need for evolving concepts and definitions suitable for Indian conditions particularly in rural areas was obvious. The CSO, therefore, constituted a working group in June, 1968 which worked out the details of the urban pilot study for rural areas, it was suggested by the group that the results of the intensive types studies of rural labour households carried out by the Labour Bureau, Simla, might be taken into account before extending the study to rural areas. These studies brought out the seasonal character of unemployment in the rural areas, seasonal under-employment among casual labour, popularity of traditional occupations, unwillingness of the local labour for out-migration, etc. However, the Programme Advisory Committee of NSS suggested in 1969 that the views of the Expert Committee on Unemployment Estimates might be awaited before launching on another labour force survey through the NSS. The CSO constituted another working group which in their two meetings held in 1971 suggested an outline of conceptual frame for the employment and unemployment surveys in rural areas keeping in view the recommendations of the Dantwala Committee. Its major recommendations were as follows :—

(i) The information on income is very necessary to measure under-employment realistically in a country like India where invisible under-employment is the dominating problem. But, as the information about family income obtained by sample surveys

suffers from certain limitations, *viz.*, difficulty in imputation of value of home-produced goods, non-accounting of the contribution of unpaid family helpers, etc., it was felt that for the sake of uniformity the data on expenditure should be collected.

(ii) For compiling the information on per capita expenditure, a feasible approach would be to utilise the data on consumer expenditure. It was felt that an idea of the relative order of expenditure could be validly obtained by asking questions about household expenditure divided into expenditure on purchases and on home-grown products.

(iii) The usual activity particulars of each individual in sample household may be collected with a view to classifying them under some homogeneous groups of population. A few questions, *viz.*, whether willing to accept any work outside the household at the prevailing wage-rates, and willing to be engaged in public works, may also be asked. A set of activity categories were also suggested.

(iv) A detailed inventory of current activities of each individual in a sample household during the reference week may be collected. A set of relevant activity categories were suggested. The intensity of work on each day of the reference week, for each type of activities pursued by an individual of the household may be collected in quantitative terms (*i.e.* in man-hours).

(v) The principal activity may be determined on the basis of total intensity during the reference week. In case of tie-ups, *i.e.*, each of two activities getting the same intensity (*i.e.* same number of working hours), the order of priority will be as 'working', 'partially working', 'not working', etc.

(vi) For those who have 'no work' during the reference week and are reported to be either seeking or available for work, information may be collected regarding duration of the state of 'not at work' and chances of getting an appointment for which they have a firm offer, if any, in the near future.

(vii) For those having principal activity as 'partially working' and seeking or available for work, further probing on duration of the time since when they are with partial work and seeking for or available for work may be asked.

(viii) In case of unpaid helpers in household enterprises, further information on the degree of commitment or non-commitment in the household enterprises and nature of activity when they are not working as helper, may be collected.

(ix) Further information for those who have been attending educational institutions as a regular student may be collected as whether they are intending to be engaged in any gainful work.

(x) For persons having principal activity as (a) working in family farm without hired labour, (b) working in family enterprise without hired labour and (c) pursuing independent profession, further question like 'working in own agriculture/enterprise, trade, etc. as a stop-gap measure and concurrently looking for or available for better employment', may be asked.

(xi) In case of persons working in other's agriculture/business/enterprise or in public sector as salarised or wage labour during the reference week, further question 'whether working as salarised employee/wage labour as a stop-gap measure and concurrently looking for or available for better employment', may be asked.

2.27 The above recommendations were considered further by a Working Group separately constituted by the Governing Council of the National Sample Survey Organisation. A draft schedule and proposed tabulation programme prepared by the Group were pre-tested in November/December, 1971. Based on the experience of the pre-test, a full-fledged survey of employment and unemployment has been incorporated in the 27th round of the National Sample Survey which commenced on 1st October, 1972 and would end in September, 1973.

2.28 Under the new approach, the unit of analysis or aggregation will be a day, though the data will be collected for a week. The level of unemployment during the different seasons/sub-rounds will be measured in terms of total number of recorded days of employment expressed as percentage of the total number of days on which the respondents report themselves to be in the labour force (employed and unemployed) during the particular season or sub-round. The level of unemployment so measured will indicate the extent of non-utilisation of the available labour supply.

2.29 For more detailed information regarding the various segments of labour force and those outside or on the periphery of labour force, to have a more realistic idea about the degree of commitment or non-commitment of those who withdraw from the labour market after seasonal work, to ascertain as to whether they withdraw because of compulsions of their "non-gainful" activity (such as household work) or whether they do so because of the presumed or real non-availability of particular type of work and also to gain an insight into the actual conditions of labour supply of other different categories, the Expert Committee suggested that a few probing questions might be put to the various segments of population classified by suitable activity categories. This, the NSS 27th round is attempting to do.

### **III. Bases of Disaggregation of Estimates of unemployment, under-Employment, etc.**

2.30 An important recommendation of the Dantwala Committee pertains to disaggregation of estimates of unemployment and under-employment. The Committee recommended that separate estimates of different segments of labour force should be attempted, taking into account such characteristics as region or State, sex, age, rural-urban residence, status or class of workers and educational attainments. The Committee also desired that an attempt be made to identify the demand likely to be generated for particular categories of labour as a result of the developmental activities envisaged under the Five-Year Plans. The Panel would like to add that in delimiting the bases of disaggregation, notice be taken of the fact that the unemployment situation in India is beset with social and political overtones and strong cultural prejudices for or against certain types of employment, activities or work. It would, therefore, be useful to lay emphasis, in any scheme of disaggregation, on socio-cultural, political and economic factors of the population as also on the aspirations and job preferences of the unemployed and the under-employed persons. The studies carried out by the NSS regarding the economically weaker sections of population during the 25th round is a step in this direction. There is scope, however, for further and more frequent studies to determine, for example, the following :—

- (i) demographic characteristics of different segments of the labour force ;
- (ii) their educational attainments and other professional and technical training or experience ;
- (iii) their present state of employment and its assessment with reference to the above background ; and
- (iv) their attitude towards employment, the cultural conditioning and inhibitions, if any.

2.31 These data, it is felt, will help in formulating the programme of employment generation, in planning supply against demand for different types of personnel or programmes of work, and working out plans aiming at transforming the social and cultural values in keeping with the socio-economic aspirations of the country. Some of the disaggregations could no doubt be fitted into sample surveys or large scale investigations, but others would call for type studies. A few suggestions which could be taken note of in organising such studies are briefly indicated below :—

- (i) A State or region consisting of more than one State is too broad an administrative unit for assessment of the unemployment or under employment situation. Therefore, the State may be

divided into smaller regions keeping in view the homogeneity of labour force characteristics *vis-a-vis* potential of development in industry and agriculture. The integrated rural surveys started by the Ministry of Irrigation and Power are an example in point.

(ii) The disaggregation of the estimates on the basis of sex should be further sub-classified according to education and socio-economic background of the households from which the individuals come.

(iii) Information should be gathered on rural and urban residence and rural-urban migration.

(iv) The status of worker needs to be studied along with job preferences and job aspirations. In this connection, the distinction between primary activity and secondary activity needs to be brought out clearly. For example, many of the students, classified as non-workers, may be available for jobs; in other cases, studies may constitute a secondary activity, primarily 'activity being a full-time job. Again, time disposition of members of labour force together with their earnings from different activities would be a more meaningful basis for disaggregation than the three-category classification of employed, unemployed and those out of labour force.

(v) A detailed classification of educational attainments needs to be attempted so as to enable the formulation of employment programmes in general and planning of jobs for men and men for jobs.

(vi) The impact of cultural factors on the unemployment situation and on the success of employment generation plans needs to be studied. For example, it would be useful to see how far the economic forces change the attitude of the people and what changes in social values would require to be planned.

2.32 There also seems to be need for assessing the impact of changes in educational levels, socio-cultural background, emergence of new technology on unemployment and under-employment so as to plan the programmes of employment on a more realistic basis. As certain type of activities or traditional professions suffer a decline, a section of the labour force would be rendered surplus. An assessment of the magnitude of this section would be required to plan avenues of employment for those involved.

2.33 There is also need for more specific and extensive study of the casual factors which influence the participation rates of different groups of population. This information will assist in making reasonably meaningful projections for the future.

2.34 *The decennial census of population* : The Decennial Census of population in India gives statistics of employment at decennial intervals from the year 1881 onwards ; of course, the concepts of workers/ employed persons have been changing from one Census to the next. A complete description of concepts and definitions used in Census 1901 to 1961 is given in the Census of India 1961, Volume I, Part II-B. The present discussion is confined only to the concepts and definitions used during 1961 Census and 1971 Census, because they pertain to the Census data now in use.

2.35 *Census 1961* : In 1961 Census, the following classification of activity of the individual respondents was made\* :

- (i) Working as cultivator.
- (ii) Working as agricultural labourer.
- (iii) Working at household industry.
  - (a) Nature of work.
  - (b) Nature of household industry.
- (iv) Doing work other than above.
  - (a) Nature of work.
  - (b) Nature of industry, profession, trade or service.
  - (c) Class of worker.
  - (d) Name of establishment.
- (v) Activity, if not working.

2.36 In essence, the above concepts and definitions implied the following :

1. Work constitutes participation.
2. Work implies production of economic goods or service either for consumption or for sale or exchange.
3. Basis of work :
  - (a) In seasonal work like cultivation, live-stock, dairying, household industry, etc.—some regular work of more than one hour a day throughout the greater part of the working season.
  - (b) In regular employment in any trade, profession, service, business or commerce—should have been employed during or on any one of the fifteen days preceding the day of enumeration.
  - (c) If same person was found unemployed during revisional round, no correction to be made in original record.

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\*For details, see Census 1961—General Economic Tables—Part-II B (i)—Registrar General of Census Commissioner, India.

(d) Person who was working but was absent due to illness or other causes from work during fifteen days preceding the day of enumeration or even exceeding the period of fifteen days was to be treated as worker.

(e) Person who has been offered work but has not actually joined is non-worker.

(f) Work includes not only actual work but effective supervision and direction of work.

(g) Person under training as apprentice with or without stipend or wages will be regarded as working.

(h) Adult woman, in addition to household work, engaged in work such as rice pounding for sale or wages or in domestic services for wages for others or minding cattle or selling fire-wood or making and selling cow-dung cakes or grass etc. was to be treated as worker.

(i) Public or social service worker actively engaged in public-service activity or political worker actively engaged in furthering the political activity of his party to be regarded as worker.

#### 4. What is not work ?

(a) Adult woman engaged in household duties but doing no other productive work.

(b) Persons like beggars, pensioners, those living on agricultural or non-agricultural royalty, rent or dividend receivers who may be earning an income but not participating in productive work, unless they also work in cultivation, industry, trade, profession, business or commerce.

**2.37 1971 Census :** In 1971, direct data on unemployment as such were not collected. However, the Census classified the population into "workers" and "non-workers" with further sub-categories of non-workers. The following concepts of "worker" and "non-worker" have been used in 1971 Census :\*

(i) *Worker* : Worker is a person whose main activity is participation in any economically productive work by his physical or mental activity. Work involves not only actual work but effective supervision and direction of work. For persons having regular work in trade, profession, service, or business, the reference period for considering the main activity was a week prior to the date of enumeration. If a person had participated in any such regular work on any one of the days

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\*Census of India-1971, Paper I of 1971, Supplement—Provisional Population Tables, issued by the Registrar General of Census Commissioner, India.

during the reference period, he has been classified as worker. A person who normally works but had been absent from work during this reference period on account of illness or travel, holiday, temporary break down, strike, etc. will be treated as engaged in regular work in which he would have otherwise been employed but for his temporary absence. Persons under training such as apprentices with or without stipends or wages will be considered as economically active and recorded as working. A person, who had merely been offered work but has not actually joined it, is not to be treated as engaged in work. There are certain types of work which are not carried on throughout the year, such as cultivation, live-stock keeping, plantation work, some types of household industry, etc. A person's main activity should be ascertained with reference to such work in the last one year even if he was not economically active in the week prior to enumeration. Even when a person is engaged in some other work during the period of one week prior to the date of enumeration the main activity may be cultivation, agricultural labour or some other work attended to normally by him in the course of the year. His main activity has been ascertained by taking into consideration the work he engaged himself mostly.

*Workers* : The workers were to be classified as :—

- (a) Cultivator.
- (b) Agricultural labour.
- (c) Household industry worker.
- (d) Other workers including factory workers, persons engaged in trade, transport, construction professions and services, political and social work, etc.

*Non-workers* : Persons having main activity as :—

- (a) household worker.
- (b) student.
- (c) retired persons or rentier.
- (d) dependents.
- (e) beggar.
- (f) resident of penal institutions or mental hospitals.
- (g) other non-workers those not coming under any of the aforesaid categories but are seeking work.

The Census also sought to ascertain gainful activity pursued as secondary work for all the persons reporting to have some gainful

work as their main activity and also from the non-workers to ascertain even their marginal and casual participation in gainful activity.

2.38 Time devoted in the gainful activity was the consideration for deciding the main or secondary activity for workers as well as non-workers.

2.39 The main difference between the concepts and definitions adopted for 1961 and 1971 Censuses was with regard to the basis of work. In 1961 Census, any person who was engaged in gainful work, howsoever small it might be, was counted as worker. In 1971 Census, the basis of classification between worker and non-worker is the main activity. It can be seen that 1961 Census definitions were less strict than 1971 Census definitions. And due to this difference in the definition of worker, a number of persons, who according to 1961 Census should have been counted as workers, were now enumerated as "non-workers". No doubt, this change in definition has resulted in loss of comparability between the data thrown up by the two Censuses.

#### **IV: Observations and recommendations on the sources of data.**

2.40 The Dantwala Committee discussed four main sources of data on employment and unemployment and suggested possible lines of improvement. These four sources included the Decennial Population Census, National Sample Survey, Employment Market Information and Employment Exchange data. The important recommendations of the Committee for improvements in these sources of data are summarised below :—\*

2.41.1 *Census* : The Census is usually taken during the slack season of the year to minimise the chance of omission of individuals from the count. In the circumstances, the use of short reference period for collecting information on economic activity would not be quite appropriate except for those whose characteristics remain essentially unchanged throughout the year. It was, therefore, necessary to modify the basis of identification of the labour force used in the Census. A strong case exists for recording the class of workers or status of cultivators in order to identify how many of them are unpaid family members and how many enter the labour market as wage employees.

2.41.2 The tabulation of data on workers by broad age groups and industrial categories and for females by marital status, etc. could be useful for obtaining labour force projections and should be attempted for the 1971 Census.

2.41.3 For the 1971 tabulation programme, uniform age groups should be adopted for compiling tables on items like unemployed, for

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\*For details See Report of the Committee of Experts on Unemployment Estimates, Planning Commission, Govt. of India, 1970.

different groups of population and to prepare the class of worker distribution for the entire working force, by sex and 5-year age groups.

2.41.4 The need for more detailed cross-classification of workers by sex, 5-year age groups, educational level, and industry was emphasised.

2.41.5 In the decennial censuses organized in 1941, 1951, 1961, some efforts were made for collecting data on unemployment. The 1941 Census results were not tabulated ; in 1951, the Census data were collected only in three States, and the number of unemployed reported in these States was very small ; in the 1961 Census, information on non-workers was collected alongwith information on persons seeking employment for the first time and persons employed earlier but currently out of employment and seeking work ; the total of these two categories was taken as representing the magnitude of the unemployed. The number of rural unemployed enumerated by the 1961 Census was thus very low.

2.42 The Committee reviewed the proposed programme for the 1971 Census and observed that the Census enumerators under-taking their work on an essentially honorary basis do not generally have training to ask probing questions for ascertaining whether a person was unemployed. It was, therefore, felt that the Census Organisation should not be burdened with the task of collecting data on unemployment.

2.43 *National sample survey* : Various Rounds of the NSS undertaken since 1953 have, according to the Dantwala Committee, helped to compile extensive data on the economically active population in India and have proved valuable for understanding the complexities of employment, unemployment and under-employment in the country and of the problems involved in measuring them. The following observations, suggestions and recommendations are pertinent in the context of further improvement of these data :—

(i) Relatively low incidence of unemployment reported by the NSS has often provoked strong criticism. Careful analytical studies of the NSS data for specific age groups of the labour force according to urban and rural residence would be of great importance for policy formulation. The rural labour force surveys conducted by the NSS were discontinued after the 17th Round because of criticism of the concepts used and on the assumption that the information derived was of no use for policy purposes. It was recommended that the NSS should resume the rural labour force surveys after taking into account the suggestions on conceptual issues made by the Committee.

(ii) The sample size of both rural and urban surveys should be large enough to permit estimates of participation rates and the incidence of unemployment in different States. The estimates of unemployment have, thus far, been based on the Central sample and valuable information collected through the matching State samples has not been utilised. The Committee emphasised the need for close cooperation between the Centre and the States for processing these data.

(iii) An attempt should be made to identify separately the proportion of persons in the labour force "not seeking but available for work" to bring out further refinement in the estimates of the unemployed. In the Rounds of the NSS from 16th Round onwards persons below the age of 15 or of 60 and above are not classified as unemployed even if they actively seek work. It was considered advisable to collect information on persons seeking or not seeking but available for work for all persons irrespective of age and to classify the information according to age, so that if any age groups are to be excluded that could be done subsequently.

(iv) In view of the sharp seasonal variations in the level of unemployment and other labour force characteristics, it was considered advisable to obtain monthly estimates of labour force characteristics through the appropriate planning of the NSS data.

(v) It would be useful if in addition to the conventional classification of the population by sex, age, activity status and class of workers, information about the number of hours of work during the reference week could also be collected.

*2.44 Employment exchange data:* The National Employment Service practically covers all the districts through a large number of Employment Exchanges. The data relating to persons on the live register are available with a relatively short time-lag of about 2 months. There are, however, certain limitations for attempting estimates of unemployment on the basis of these data. These include, among others, the fact of the Employment Exchanges being located in the urban areas, the fact that not all persons registered are necessarily unemployed, that some of the registrants are outside the labour force as per the usual definitions, that the catchment areas of these Employment Exchanges include both rural and urban job seekers and the components of the mixture are not known, that there is multiple registration, etc.

*2.45* The Committee recorded the need for conducting periodical surveys to assess the significance of the above mentioned factors and to work out appropriate corrections for adjusting the employment exchange data. These surveys should be conducted by personnel who

are independent of the Employment Exchanges and with the assistance of research workers from universities and other academic institutions.

To make the data from live registers of the Employment Exchanges comparable and complementary to the NSS data, the Committee felt that the educational classifications should be uniform.

2.46 It was also of the view that the renewal period for registration should be made uniform all over the country, and not vary between States or within a State.

2.47 *Employment market information*: The employment information programme taken up during the Second Plan period and strengthened through the Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 was intended to cover all establishments in the public sector except the establishments under the Ministry of Defence and non-agricultural establishments in the private sector employing 25 or more workers. With effect from March, 1966 the coverage was extended to all public sector establishments and to all non-agricultural establishments in the private sector which employ 10 or more workers.

2.48 The data on number of persons employed in these establishments are available for States and for such sectors as plantations, mining, manufacturing, construction, electricity, trade and commerce, transport and communication and services classified under a 3-digit code. The data from Employment Market Information is a particularly useful barometer of changes in the employment situation in urban areas.

2.49 The Dantwala Committee recommended that the EMI should aim at covering all establishments using power and employing 10 or more workers as well as the establishments not using power but employing 20 or more workers. The quality of the data might be sought to be improved by suitable classifications such as rural and urban locations.

2.50 In order to improve the response and the quality of data collected, the Committee further recommended that the EMI data should be collected through interview method instead of postal method.

#### *Action taken on the recommendations of the Dantwala Committee*

2.51 The Planning Commission set up, in November, 1970, an Inter-departmental Technical Committee under the Chairmanship of the Employment Commissioner with representatives from the Central Statistical Organisation, the Office of the Registrar General, India, the National Sample Survey, etc., to suggest the necessary follow-up

measures on the recommendations of the Dantwala Committee. The Inter-departmental Committee was specifically asked :

- (i) to examine the utility, feasibility, and priority of the arrangements for the collection of data, and the studies recommended by the Dantwala Committee as well as other official agencies ;
- (ii) to suggest specific measures and studies to be undertaken by the different agencies on an urgent basis within their existing resources;
- (iii) to suggest any special studies to be undertaken for which additional or specific facilities may have to be provided ;
- (iv) to indicate the agencies to which such studies could be entrusted, including non-official research bodies, universities and institutions through the Research Programme Committee and Social Science Research Council or otherwise ; and
- (v) to examine the basis of approach and methodology for organising the data collection or building up suitable norms and for estimating employment potential in different sectors under the Plan schemes and programmes.

2.52 The Inter-Departmental Committee reviewed the recommendations of the Dantwala Committee and also discussed the programme of the 1971 Census by the Registrar General, the programme of surveys to be undertaken by the NSSO, the data collected by the DGE&T and the procedures of analysis of these data. The agencies concerned proposed about 40 studies on different aspects of labour force, employment and unemployment concepts, definitions and estimates. The Inter-departmental Committee reviewed these proposals and suggested in each case the agency most suitable for undertaking them. A list of these studies along with the recommendations of the Inter-departmental Committee on each of them is indicated in the subsequent paragraphs.

2.53 In April, 1971, the Planning Commission constituted an Advisory Committee of Economists on Employment Studies with the following terms of reference :

- (i) to assist in drawing up and implementing a programme of studies on employment and unemployment through academic institutions to supplement the programme undertaken by official agencies ;
- (ii) to guide and co-ordinate studies that might be undertaken by academic institutions in all parts of the country in relation to formulation, implementation and appraisal of current operations of special programmes with employment emphasis already initiated such as small farmers development agency,

marginal farmers and agricultural labourers and rural works programmes in drought prone areas ; and

(iii) to advise on the evolution of an integrated approach to employment orientation of development planning as a whole and for different sectors and at different levels.

**2.54** This Advisory Committee made the following recommendations for further studies being undertaken :

<i>Studies</i>	<i>Recommendations</i>
1. Concepts and Definitions and Studies on Labour Force Characteristics.	A comprehensive labour force survey may be taken up in the 27th Round of the National Sample Survey.
2. Estimates of Employment Generation.	Three Groups might be set up to undertake studies on employment generation in selected sectors namely (i) constructions including roads, houses, canals and dams, etc. (ii) Industries (Selected large scale industries, small scale industries, agro-industries) and (iii) impact of mechanisation in agriculture.
3. Impact studies on command areas of major irrigation projects.	These studies will primarily have to be undertaken by the State Governments who can be given necessary guidance, by the Universities and the IAMR. Selected studies to the universities.
4. Studies on Green Revolution including impact of mechanisation.	The Group (iii) suggested under 2 above might deal with this.
5. Studies on choice of technology.	A study of the employment implication of the technical mix at the Nagarjuna sagar project may be taken up.
6. Study on manpower mobility and rural-urban migration during slack and peak agricultural seasons.	The NSS Organisation might undertake suitable studies.
7. Income and Associated Studies.	The NSS Organisation might undertake suitable studies either on the basis of existing data or by organising collection of fresh data.
8. Analysis of Agricultural wage data	The Agricultural wage data should be collected on a more systematic basis by the Directorate of Economics and Statistics, Ministry of Agriculture. The Directorate also should attempt a detailed analysis of the data by various occupational categories in different districts, so as to study the seasonal variations in respect of different categories of agricultural workers and for various agricultural operations.

*Studies**Recommendations*

9. Studies on impact of special programmes such as MFAL, SFDA, etc.	While side by side with the implementation of these programmes, there would be a concurrent evaluation by the State Bureau of Economics and Statistics and the long term aspects would be investigated by the Programme Evaluation Organisation, it was felt that there was scope for some studies by Agro-Economic Research Centres as well as selected universities on the employment implications of these special programmes in selected areas.
10. Fiscal measures for promoting employment.	A study might be taken up.
11. Studies regarding planning at the local level and preparation of integrated district Plans.	Selected studies should be undertaken by the Government in close association with Universities and Research Institutions.

2.55 In pursuance of the recommendations of the Advisory Committee of Economists, the Planning Commission appointed two working groups to define the scope of the studies on employment in construction and employment generation in industries.

2.56 The Planning Commission have approached a number of universities and research organisations to undertake research work on the topics recommended by the Advisory Committee earlier.

2.57 In addition to the action taken by the Planning Commission as summarised in the previous paragraphs, the following steps were taken by the other concerned organisations :—

(i) The Central Statistical Organisation studied the question of concepts and definitions on employment, under employment & unemployment suitable for rural areas of the country through a working group. These concept and definitions have been adopted on an experimental basis for the 27th Round of the National Sample Survey which would be a full-scale labour force survey along the lines suggested by the Dantwala Committee.

(ii) The Registrar General has drawn up a tabulation plan incorporating several of the suggestions of the Dantwala Committee.

(iii) The DGE&T have planned a survey of the registrants of employment exchanges for improving estimation of the correction factors for employment exchange data.

## SECTION-III

### Sources of Current Statistics

3.1 The four main sources of data on the subject including the decennial population of Census, the National Sample Survey, the employment exchange data of the DGE&T and the employment market information were exhaustively discussed by the Committee of Experts on Unemployment Estimates\* and need not be gone over again. The limitations of these data have also been brought out by the said committee; the committee made suggestions too for their improvement. Since the publication of the Dantwala Committee Report, fresh information has been thrown up by these agencies and in some cases efforts have been made to remove the defects and draw-backs pointed out by Dantwala Committee. The following material is considered relevant to a study of the problem of unemployment and under-employment :

#### The Relevant Tables of the 1971 Census\*\* :

- (i) B-I Part A Workers and non-workers according to main activity classified by sex and age groups (full count).
- (ii) B-I Part B Female workers and non-workers according to main activity classified by marital status and age groups (Sample).
- (iii) B-II Workers and non-workers in cities and non-city urban area according to main activity by sex and age groups (full count).
- (iv) B-III Part A Classification of workers and non-workers according to main activity by educational levels in urban areas only (Sample).
- (v) B-III Part B Classification of workers and non-workers according to main activity by educational level in rural areas only (Sample).
- (vi) Part A Industrial Classification of persons at work other than cultivation as main activity by sex and divisions major groups and minor groups (Sample).
- (vii) B-VII Secondary work, i.e., persons having main activity (i) as cultivator, (ii) as agricultural labourer, (iii) as household industry and (iv) non-workers classified by sex and secondary work (a) at household industry (b) as cultivator or (c) as agricultural labourer or (d) non-household industry, trade, business or service (Sample).

\*For details see Report of the Committee of Experts on Unemployment Estimates, Planning Commissions, Govt. of India, 1970.

\*\*Tabulation Plan-1971 Census issued by the Registrar General and Census Commissioner, India.

- (viii)-B-VIII . . Persons classified as non-workers according to main activity cross-classified by sex, broad age groups and type of activity (Sample).
- (ix)-B-IX Part A Non-workers categorised as others aged 15 and above classified by sex, broad age-groups and educational levels in urban areas only (Sample).
- (x)-B-IX Part B Non-workers categorised as others aged 15 and above classified by sex, broad age groups and educational levels in rural areas only (Sample).
- (xi)-G Series . . Special Tables for Degree Holders and Technical Personnel (Full count).
- (xii)-G-I- . . Distribution of Degree Holders and Technical personnel in each subject field by levels of qualification.
- (xiii)-G-II . . Distribution of Degree Holders and Technical personnel in each subject field by Employment status and level of qualifications.
- (xiv)-G-III . . Distribution of Degree Holders and Technical Personnel by levels of qualifications and emoluments by sector of employment.
- (xv)-G-IV . . Distribution of Degree Holders and Technical Personnel by subject field, age-groups and sector of employment further classified by emoluments.
- (xvi)-G-V . . Distribution of employed (other than self-employed) Degree Holders and Technical Personnel by type of organisation of present employment classified by levels of qualifications and subject fields.
- (xvii)-G-VI . . Distribution of unemployed Degree Holders and Technical Personnel with engineering and technology qualification classified by degree and diploma levels and by subject of such degree and diploma.
- (xviii)-G-VII . . Distribution of Degree Holders and Technical Personnel who are unemployed and seeking employment in each subject field by duration of employment, level of education and sex.
- (xix)-G-VIII . . Distribution of unemployed Degree Holders and above in Arts, Humanities and Commerce classified by Degree and their subjects.
- (xx)-G-IX . . Distribution of unemployed Degree Holders and above in Science subjects classified by Degree and their subjects.
- (xxi)-G-X . . Distribution of unemployed persons having qualifications in technical/vocational trades by subjects.
- (xxii)-G-XI . . Degree Holders and Technical Personnel engaged in research by subject field and educational levels.
- (xxiii)-G-XII. . Distribution of Degree Holders and Technical Personnel by country of qualification, subject field, qualification levels and sex.

3.2. The second important source of data, that is, the National Sample Survey has added new information since the publication of the Dantwala Committee Report.

3.2.1 *Twenty-fourth round of NSS (1969-70)*: In the 24th Round (July, 1969-June, 1970), data were collected on the under-mentioned items :

- (i) number of household members engaged in gainful work— their principal industry and occupations;
- (ii) number of days and hours worked in the principal occupation and all the occupations pursued during the reference period of a week;
- (iii) number of hours available for extra work;
- (iv) in case of those who did not have any gainful engagement during the week, information was obtained about their being in search of or available for work; and
- (v) whether they were currently attending educational or training institutions.

On the basis of these items, some of the State Statistical Bureaux have provided estimates of the total population, persons with gainful work, persons seeking or available for work and persons who were under-employed along with their distribution by sex, age-group, educational qualification and rural-urban residence.

3.2.2 *Twentyfifth rounds of N.S.S. (1970-71)*: In the 25th Round (1970-71) of the NSS, the information was collected on the socio-economic condition of the weaker sections of the rural population. The data collected include the following details in respect of the lowest ten per cent of the households having cultivated land (small cultivator households) and non-cultivating wage-earner households :\*

- (i) Time disposition during the reference week of all the members of the household along with their demographic particulars as well as the earnings of the wage earners during the same period.
- (ii) Consumer expenditure,
- (iii) Particulars of household holding,
- (iv) Receipts from agricultural as well as non-agricultural sources.

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\*The National Sample Survey—Twenty-fifth round: July, 1970-June, 1971 Tables on employment and unemployment situations in rural areas, issued by the National Sample Survey Organisation Department of Statistics, Cabinet Secret at, Govt. of India, 1972.

- (v) Disbursement on account of agricultural operations.
- (vi) Inventory and transaction of physical assets, livestock & poultry.
- (vii) Indebtedness along with the source from which the loan is taken.
- (viii) Problems and prospects—Here, effort was made to obtain the views of the small cultivators on their problems regarding the different activities and also to get their opinion on the prospects of improvement of their economic conditions through government measures. The objective was to assess their needs for betterment through economic development in agricultural and non-agricultural sectors.

Data collected covered the following items :

- (a) Possibilities of land development/repair/improvement and long-term credit requirements supply.
- (b) Opinion regarding economy of draught animals and medium-term credit requirements supply.
- (c) Adoption of new technology and short-term production credit requirements and supply.
- (d) Possibilities of supplementing the income of the household from ancillary agricultural and non-agricultural activities.
- (e) Willingness of the members of the household to move outside the village in the event of regular full-time wage employment being offered to them, particularly in public works.

However, the data so far released do not include items (ii), (iii), (v), (vi), (vii) and (viii-a, b and c).

*3.2.3 Twenty-sixth round of N.S.S. (1971-72) :* Information was collected on the following items concerning the members of the sample households :—

- (i) usual economic status with a reference period of a year;
- (ii) number of days worked or having a job or work but not actually at it in some gainful activity during the reference period of a week preceding the date of survey; and
- (iii) in case any person did not work on any day during the reference week, whether he was seeking and/or was available for work, full time or part time, within the village or nearby or anywhere outside the village.

The results of the survey have not yet been published.

*3.2.4 Twenty-seventh round of NSS:* The work has commenced in the month of October, 1972 and is expected to last up to September, 1973. Household survey of employment and unemployment is the subject of enquiry in this round, keeping in view the main recommendations of the Dantwala Committee. The main features of the enquiry are as follows :—\*

(i) Unemployment will be measured as days of unemployment expressed as percentage to the total number of days on which the respondents report themselves to be in the labour force (*i.e.* employed or unemployed) during the season or sub-round. The level of unemployment so measured will indicate the extent of under-utilisation of the available labour supply.

(ii) In order to have more realistic idea about the degree of commitment or non-commitment of those who withdraw from the labour market after seasonal work and to ascertain as to whether they withdraw because of compulsions of their non-gainful activity such as household work or whether they do so because of the presumed or real non-availability of particular type of work and also to gain an insight into the actual conditions of labour supply of other different categories, probing questions have been put to the various segments of population classified by suitable activity categories. Both current as well as usual status to record the participation into gainful activities are being tried in this round. The account of those who have temporarily out-migrated from or inmigrated to the sample household and the reasons for their out-migration or in-migration are being collected. Irrespective of whether a person works throughout the year or not, the possibility of his or her taking up additional work or employment to augment personal or family earnings and to utilise the idle time for productive purposes is being ascertained.

For how many months the persons normally seek or are available for wage or salaried employment, whether there is any preference for the location of that employment is being recorded. Information is being elicited on the possibilities and problems concerning the development and improvement of the cultivated holdings of the households in both rural and urban areas. The credit requirement of such development activities are also being ascertained. Employment and under-employment in relation to the earnings is being studied.

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\*For details see National Sample Survey : Twenty-seventh round : Instructions to Field Staff Vol. I, Designs, Concepts, Definitions and Procedures issued by the National Sample Survey Organisation, Govt. of India, September 1972.

3.3 The Dantwala Committee had recommended the retabulation of National Sample Survey's past data so that disaggregated estimates of unemployment and under-employment could be obtained. A list of retabulations with dummy tables in each case was prepared and studied by the Panel. The possibilities of getting these retabulations done were also explored. On reconsideration of the issues involved, it is felt that the effort involved in going back to the past data might not be worthwhile.

3.4 The Panel feels that the NSS as a source of data has great potential for the development of the entire statistical structure of manpower planning and for study of employment and unemployment in the country and should be fully exploited.

3.5 The data from the employment exchanges and employment market information were available up to December, 1971; on certain items, the information is available even as on 30th June, 1972. Detailed tabulations of those data have been attempted and examined. Particularly, it was considered whether the district-wise information when studied in association with the data on non-workers from the 1971 Census could give the intensity of unemployment on district basis; whether it could at least help in ranking the districts in order of intensity of unemployment. The exploratory studies have shown that this information does not help much in disaggregation of unemployment and under-employment in the country according to the recommendations of the Dantwala Committee. However, it may be added that this source of information could be further improved. Sample studies on the registrants on the live register in association with the NSS enquiries can give valuable information, for the assessment of unemployment and under-employment. The Panel has not used the technical ratios estimated in this behalf through 1968 surveys of the DGE&T because of the limitations of those ratios. Wherever the context demanded, the data and information from the employment exchanges and employment market information have been used in the report with clear indication of their limitations.

3.6 In addition to these three important sources of information, the Panel tried to explore the possibilities of bringing together data on the subject from other sources hitherto not tapped. The Labour Bureau of the Ministry of Labour and Rehabilitation carried out intensive study of selected rural labour households in some districts of the country during 1967-70. The general objective of these studies was to have a diagnostic study of the local labour problems in greater depth. The specific objectives of the intensive type of studies on rural labour included the following :—

- (i) To study the nature of employment, unemployment and under-employment in the selected regions of the country.

(ii) To find out the extent to which the work/projects/programmes taken up by the Government and other agencies have provided employment opportunities in rural areas.

(iii) To assess the various welfare facilities already available to rural households under different welfare programmes, the extent to which these facilities are being availed of and to study the attitude of the beneficiaries to such programmes and

(iv) To facilitate the formulation of proper action programmes necessary for improving the conditions of employment and welfare facilities available to rural labour households.

3.7 Twenty-one regions of the country were selected for the conduct of the studies, in some cases, a region comprised the entire State. From each region, a typical district in which rural works programme had made a demonstrable impact was selected in consultation with the rural works wing of the Department of Community Development. While making the selection, possibility was also explored of selecting some district in which the Planning Commission had carried out area development studies. The studies were confined to three selected villages in the district selected in each region. The three types of villages were defined and selected according to defined criteria in consultation with the concerned State authorities. Although these studies were designed to be of diagnostic type and not sample surveys of the usual type, yet it was considered necessary to resort to sampling. Forty households were selected from the list of labour households in each selected village and periodical data on labour force characteristics and labour time disposition of the working members belonging to the sample households were collected. The data for 12 of these studies have been available so far. Needless to say that the coverage of these studies is not large enough to warrant the generalisation of the results to the entire State, all the same, it is a valuable source of new information on the subject.

3.8 During the last 15 to 20 years, a number of studies on a small scale were carried out by different agencies which either exclusively or, *inter alia*, studied the problem of unemployment and under-employment among small segments of the population. Reports on a number of such studies were obtained and examined. It was found that the data from these studies were not adequate either to give disaggregated picture of the global unemployment problem in the country, nor could the data indicate the trend over time in the changing situation. All the same, the results of these studies bring out the diverse facets of the problem, the heterogeneity and variation between different areas and different groups of population and the difficulty in building up integrated picture in a uniform way. Forty-one of these studies are

found to be typical and are studied in detail with regard to their location, coverage, design and main findings. The results of these studies from different States are used to supplement the available data for reviewing the State-wise situation. It is also considered useful to bring the results of all the studies together and indicate them at one place as appendix to the report.

3.9 The Committee on Unemployment, at earlier stages of its work, sponsored 7 *ad hoc* studies on small scale to collect information on certain topics of the problem. The studies were mainly directed towards elaborating concepts and definitions or estimation of technical ratios and for determining the bases for disaggregation of the problem of unemployment and under-employment. These studies were scientifically planned jointly by the secretariat of the Committee, the project directors and the study staff. They would throw up very useful information which would further elaborate the issues referred to above. However, the reports of these studies could not be available to the Panel by the time of finalising its report, but they would be available to the Committee. Reports on two of the studies received so far have been studied and results are given in an appendix to this report.

3.10 An integrated approach to the study of this problem calls for a suitable set up which is not available at this time. The adequate exploitation of the sources of data would not be possible through *ad hoc* arrangements or short-term efforts. The Panel has attempted to suggest a suitable machinery in the form of a Department of Manpower Planning and Employment and The National Commission on Manpower and Employment. The enormous amount of detailed analysis of the data and a variety of studies to be taken up for building up a suitable statistical base can only be taken up by the proposed Commission. We are convinced of this after reviewing the data available, the studies carried out by various organisations from time to time, studies taken up by the Government agencies, sponsored by the Planning Commission and also by the Committee on Unemployment. Therefore, the arrangements for continuous and long-term study of the problem should be made as an integral part of the Government machinery, to begin with, at the national level. The lines along which further action can be taken and the details thereof would, however, be the function of the proposed Commission.

## SECTION-IV

### Data Derived from Population Census, 1971

4.1 Two series of the Census Tabulation Plan, 1971, namely, B-Series (Economic Tables) and G-Series (Special Table for Degree Holders and Technical Personnel) contain data which are relevant to the assessment of employment, unemployment, etc. The details of these tables are given in Section III of this Report.

4.2 In the B-Series, there are 10 tables relevant to our purpose setting out data on the classification of the population into 'workers' and 'non-workers' and in further seven sub-categories of 'non-workers' by broad age-groups, type of activity and educational levels. Some of these tables are based on full count and others are based on 1% sample. The classification of workers and non-workers are also given according to their secondary work or activity. The relevant information derived from these census tables is compiled into four tables given as Annexures I—IV.

*Annexure I* : State-wise percentage of workers, of non-workers with subsidiary activity, of other non-workers and of their total to population by sex and rural-urban residence in 1971 Census.

*Annexure II* : State-wise percentage of workers and persons seeking work to total population classified by sex and rural-urban residence in 1961 Census.

*Annexure III* : State-wise percentage of total unemployed persons to total population classified by sex and rural-urban residence in 1961 Census and percentage of 'other non-workers' to population in 1971 Census by sex and rural-urban residence.

*Annexure IV* : State-wise percentage of persons (aged 15 to 59) seeking work to the population in the corresponding age group classified by sex and rural urban residence in 1961 Census and percentage of other non-workers (aged 15 to 59) to population in corresponding age groups in 1971 Census classified by sex and rural-urban residence.

4.3 It has already been explained in another section of the report that the classification of the population into workers and non-workers in 1971 Census is not comparable to the same classification in the 1961 Census due to the difference in the definition of workers in

the two Censuses. In 1971 Census, questions of secondary activity were included even for the non-workers whose main activity was indicated as one of the non-workers activities. The number of these persons having gainful secondary activity is combined with the number of workers as such and their percentage to population is computed and shown in the table mentioned above. However, the corresponding percentages in 1971 Census are much below those of the 1961 Census. This could be due to either of the two reasons or the combined effect thereof, that is, there might be a real fall in the proportion of workers in the population or the secondary activity of the non-working population is not accurately ascertained so as to bring the total number of persons having a gainful activity either as their primary or subsidiary work or secondary work at par with the 1961 definition of worker. Whatever be the reasons, the data as available now do not appear to be comparable.

4.4 From Annexure I, it would be observed that the proportion of females having gainful work either as main or subsidiary activity varies among major States in India from 1.68% in Punjab to 25.91% in Andhra Pradesh. Among males, this percentage varies from 44.54% in Kerala to 57.85% in Andhra Pradesh. In rural areas, the participation of women in gainful work (either as primary or secondary activity) varies from 1.27% in Punjab to 31.69% in Andhra Pradesh. Among males, this percentage varies from 44.76% in Kerala to 60.30% in Andhra Pradesh. In urban areas, the percentage of working population varies from 3.03 in Punjab to 11.60 in Andhra Pradesh for females and 47.78 in Andhra Pradesh to 50.72 in Maharashtra for males.

4.5 In 1971 Census, the non-workers were divided into a number of sub-categories like students, household workers, rentiers, pensioners, etc. There is a residual category of non-workers which includes persons who are seeking work or are available for work or have no activity and are also seeking work. The percentage of this sub-category is also shown in Annexure-I. The total of the three groups, namely, 'workers', 'non-workers with subsidiary activity', and 'other non-workers' might approximate to the percentage of population in the labour force. These percentages for different states and according to rural/urban residence are given in Annexure-I.

4.6 In Annexure II, the data on proportions of workers and persons seeking work and their totals classified according to urban/rural residence are shown. Again, in 1961 Census, these percentages approximated to the proportion of labour force in the population.

4.7 In Annexure-III, the data on percentage of persons seeking work in 1961 Census and the percentage of "other non-workers" to

population in 1971 Census are brought together. These data are also classified according to sex.

4.8 It is felt that among the sub-category 'Other non-workers' of 1971 Census the males in the age-group 15 to 59 might approximate to the number of unemployed males in the said age-group as per 1961 Census. The same cannot, however, be said of the females. Therefore, the data on percentage of 'Other non-workers' in the age-group of 15 to 59 with the corresponding population of this age-group in respect of each state are shown in Annexure IV. This table also indicates the percentage of persons seeking work in 1961 Census in corresponding age groups. It is observed that the percentage of male 'other non-workers' aged 15 to 59 among the corresponding population is higher than the percentage of unemployed among males observed in 1961 Census in the same age-group.

#### Data on Graduates and Technical Personnel

4.9 Along with the 1971 Census enumeration a card was canvassed among all graduates and technical diploma or certificate holders. Through his normal round for census taking the census enumerator was required to hand over a card to each of the degree holders and technical diploma or certificate holders in a household. The respondents were required to fill up these cards at their leisure and hand over the same to the enumerator when he called at the household next during his revisional round. Nearly 2.2 million such cards were filled and returned. Data collected through these cards attracted a lot of attention, particularly in view of the serious unemployment situation among the technically qualified persons in the country. In early 1972, the Registrar General (India) presented these data at the national level in 12 tables. Recently, the same 12 tables are prepared by the Office of the Registrar General separately for each State. In view of the importance of the problem of unemployment among the technically qualified personnel these data are discussed in detail in the subsequent paragraphs.

4.10 The 12 tables released by the Registrar General in early 1972 giving information on the national level were studied by the Division for Scientific and Technical Personnel of the Council of Scientific and Industrial Research (CSIR) in conjunction with the data regarding the output of different types of graduates by the Indian universities during the last 10 years and similar data from the 1961 Census collected through the individual slips. The census operation of 1961 specially surveyed the scientific and technical personnel in the country. The data regarding graduates in arts, commerce and humanities were obtained from the individual slips and formed the basis for comparison

in future. To each category, the number of graduates turned out by the universities were added for each year and some decrements were made due to deaths, migration, etc. The stock of different types of personnel as computed through this method and published by the CSIR are given in Table—1 :

TABLE-I

*Stock of personnel in early 1971\**

Category	Level	Stock
Agriculture . . . . .	Post-Graduate	13,500
Do . . . . .	Graduate	47,200
Veterinary Science . . . . .	Post-Grad. & Grad.	13,000
Science . . . . .	Post-Grad.	1,39,200
Do . . . . .	Graduate	4,20,000
Engg. & Tech. . . . .	Degree	1,85,400
Do. . . . .	Diploma	2,44,400
Medical . . . . .	Degree	97,800
Do. . . . .	Diploma	27,000
Nursing . . . . .	Degree	800
Do. . . . .	Dip. & Cert.	80,000
Arts and Humanities . . . . .	Post-Grad.	3,90,700
Do. . . . .	Grad.	11,38,700
Commerce . . . . .	Post-Grad.	43,800
Do. . . . .	Graduate	2,67,800
		— — —
	TOTAL	31,09,300

\*“Unemployment among Technical Personnel and other Graduates, Technical Manpower Bulletin issued by the Division of Scientific and Technical Personnel, Council of Scientific and Industrial Research, New Delhi, April, 1972.

4.11 The unemployment among graduates and postgraduates as revealed by the special Census enumerations, 1971 are given in Table—2 below :

TABLE-2

*Percentage of unemployment among graduates and post-graduates as per special census enumeration, 1971\**

Subject Field	Post-Graduate (including Doc.)			Graduates†		
	Seeking Employment	Not Seeking Employment	Total Unemployment	Seeking Employment	Not Seeking Employment	Total Unemployment
Science (other than Agri.)	10.05	2.91	12.96	19.18	5.55	24.73
Agriculture .	7.25	0.70	7.95	13.32	1.26	14.58
Engg. & Tech.	4.62	0.45	5.07	11.51	0.66	12.17
Veterinary .	1.47	0.13	1.60	6.71	0.29	7.00
Medical .	2.00	0.53	2.53	5.31	1.02	6.33
Arts . .	10.36	5.70	16.06	15.10	8.67	23.77
Commerce .	7.07	0.93	8.00	16.36	1.76	18.12

\*“Unemployment among Technical Personnel and other Graduates, Technical Manpower Bulletin issued by the Division of Scientific and Technical Personnel Council of Scientific and Industrial Research, New Delhi, April-1972.

†Retired and unspecified categories have been excluded from the Census data in arriving at the percentages.

4.12 The number of special cards received back is estimated at 2.2 million which appears to be far short of the number of graduates in the country, because according to 1961 Census, the number of graduates, and above enumerated in the country were 1.5 million. Apparently, in the course of the 10 years with the expansion of education, the number of graduates and post-graduates should not be so low. CSIR, however, used these special cards to estimate the under-enumeration of the graduates of different categories and used these ratios for determining the number of unemployed persons of these categories in the 1971 Census. Needless to say that these percentages are a rough approximation based on the assumption that the ratio of unemployed among the persons who returned the special enumerated cards would be the same as among the entire population of each of the group. Based on these ratios, the CSIR study estimated unemployment in the early 1971. These estimates are given in table 3 below :

TABLE-3

*Estimated unemployment in early, 1971\**

Subject Field	L E V	Persons (Male & Fe-male)					Female		
		E	Seeking Emp.	Not Seeking Emp.	Total	Seeking Emp.	Not Seeking Emp.	Total	
		L	Emp.	Unemploy-ment	Employ-ment	Emp.	Unem-ployment	Employ-ment	
Science . . .	PG	12,990	4,051	18,041	4,555	3,281	7,836		
Science . . .	G	80,556	23,310	103,866	18,625	18,320	36,945		
Agriculture . . .	PG	980	94	1,074	30	3	33		
Agriculture . . .	G	6,287	595	6,882	85	25	110		
Engg & Tech. . .	Deg.	19,782	1,168	20,950	461	158	619		
Engg & Tech. . .	Dip.	34,167	1,833	36,000	991	190	1,181		
Medicine . . .	Deg.	4,411	880	5,291	1,302	453	1,755		
Medicine . . .	Dip.	1,021	494	1,515	51	135	186		
Veterinary . . .	Deg.	760	34	794	28	5	33		
Sub-Total . . .		1,61,954	32,459	1,94,413	26,128	22,570	48,698		
(Scientific & Technical Personnel).									
Arts . . .	P	40,477	22,270	62,747	18,260	19,240	37,500		
Arts . . .	G	1,71,944	98,725	2,70,669	66,388	84,844	1,51,232		
Commerce . . .	PG	3,097	407	3,504	77	66	143		
Commerce . . .	G	43,812	4,713	48,525	1,345	924	2,269		
Sub-Total . . .		2,59,330	1,26,115	3,85,445	86,070	1,05,074	1,91,144		
Grand Total . . .		4,21,284	1,58,574	5,79,858	1,12,198	1,27,644	2,39,842		

P.G. = Post-Grad. including doctorate. G = Graduate or equivalent.  
 Deg. = G+PG Dip.=Diploma.

\*Unemployment among Technical Personnel and other Graduates. Technical Manpower Bulletin (April 1972), issued by the Division of Scientific and Technical Personnel Council of Scientific & Industrial Research, New Delhi.

4.13 Estimates of the total stock and those unemployed among them according to sub-categories are also worked out and published by the CSIR in the note "Unemployment among Technical Personnel and Other Graduates" appearing in the 'Technical Manpower Bulletin' of April, 1972.

4.14 In the annexures V, VI, VII and VIII, data compiled from the special cards tabulated by the census authorities are given. A brief review of the tables is given below:

4.15 In major states (Annexure V) the proportion of unemployed among the technical personnel who returned the special enumeration card varied from 2.86 per cent in Orissa to 26.13 per cent in West Bengal among males and 7.22 per cent in Orrissa to 33.62 per cent in West Bengal among females. The proportion of unemployed among female personnel in almost all the states is higher than that among the males.

4.16 In Annexure VI, the proportion of unemployed persons in different states according to subject fields is given. The proportion of unemployed women is higher than proportion of unemployed men almost for all fields and in most of the states. The higher percentage of unemployed is in arts, humanities and commerce. In arts and humanities the percentage of unemployed women varies from 8.1 per cent in Orissa to 34.8 per cent in West Bengal; the percentage of unemployed among males varies from 3 per cent in Meghalaya to 25.7 per cent in Bihar. In commerce, the highest percentage of unemployed is among women in Kerala (40.4 per cent) and among men in Bihar (44.1 per cent). The lowest percentage of the unemployed is among the nursing personnel and the next lowest is among the medical personnel. However, even the percentage of unemployed among medical practitioners is quite high when it is considered in the context of the lack of health services in the country. In Annexure VII (a to c) the median duration of unemployment for different subject fields is given according to the level of qualifications and according to sex. Considering all subject fields together, the average duration of unemployment for females is higher than the corresponding average age for males. People at the certificate level of education have remained in unemployment for about 21 months in case of males and for two years in case of females. Even for persons with a doctorate degree, average duration of unemployment is 12 months for males and 15 months for females. The average duration of unemployment is the highest among persons with qualifications for arts and humanities. It is lowest for persons with medical qualifications. Surprisingly, the average duration of unemployment for nurses is about  $1\frac{1}{2}$  years after diploma and about 16 months after a graduate degree.

A dependable and reasonably accurate method of assessing the total stock of different types of technical persons in the country is through the tabulation of the individual slips from 1971 Census with reference to the entries regarding residence and educational levels. Some of these tabulations have become available\* and relevant data are given in tables 4(a), 4(b) and 4(c).

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\*B—Series (Economic Tables)—1971 Census Mimeographed Copy available through the courtesy of the Registrar General of Census Commissioner, India.

TABLE-4(a)

Data on graduates and technical personnel collected through individual slips, Census 1971. (Urban Areas)

Educational Levels	Distribution of Total Population by Educational Levels			Other 'Non-Workers'			Percentages		
	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7	8	9	10
1. Technical diploma or certificate not equal to degree .	2,11,900	1,67,200	44,700	13,300	9,900	3,400	6.28	5.92	7.61
2. Graduate degree other than technical degree .	17,42,500	13,38,100	4,04,400	1,500	54,300	17,200	4.10	4.06	4.25
3. Postgraduate degree other than technical degree .	4,77,300	3,61,200	1,16,100	13,000	9,200	3,800	2.72	2.55	3.27
4. Technical degree or diploma equal to degree or post graduate degree .	4,32,300	3,43,500	88,800	12,500	9,800	2,700	2.88	2.85	3.04
Engg. & technology .	1,66,100	1,61,800	4,300	6,700	6,600	100	4.03	4.08	2.33
Medicine .	1,10,400	89,200	21,200	1,700	1,400	300	1.54	1.57	1.41
Agriculture, veterinary & dairying .	14,500	13,300	1,200	200	200	..	1.38	1.50	..
Teaching .	1,27,000	67,200	59,800	3,700	1,400	2,300	2.91	2.08	3.85
Others .	14,300	12,000	2,300	200	200	..	1.40	1.66	..
<b>Total</b> .	<b>28,64,000</b>	<b>22,10,000</b>	<b>6,54,000</b>	<b>1,10,300</b>	<b>83,200</b>	<b>27,100</b>	<b>3.85</b>	<b>3.76</b>	<b>4.14</b>

TABLE-4 (b)

*Data on graduates and technical personnel collected through individual slips, Census 1971—(Rural Areas)*

Educational Level	Population			'Other Non-Workers'			Percentages		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
1. Technical diploma or certificate not equal to degree	1,94,900	1,37,600	57,300	23,100	14,000	9,100	11.85	10.17	15.88
2. Graduate degree including technical degree	8,62,200	7,78,400	83,800	70,800	60,700	10,100	8.21	7.80	12.05
<b>Total</b>	<b>10,57,100</b>	<b>9,16,000</b>	<b>1,41,100</b>	<b>93,900</b>	<b>74,700</b>	<b>19,200</b>	<b>8.88</b>	<b>8.16</b>	<b>13.61</b>

TABLE-4 (c)

*Data on graduates and technical personnel collected through individual slips, Census 1971. (All India— Rural & Urban Areas)*

Educational Level	Population			'Other Non-Workers'			Percentages		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
1. Technical diploma or certificate not equal to degree	4,06,800	3,04,800	1,02,000	36,400	23,900	12,500	8.95	7.84	12.26
2. Graduate degree including technical diploma and above	35,14,300	28,21,200	6,93,100	1,67,800	1,34,000	33,800	4.77	4.75	4.88
<b>Total</b>	<b>39,21,100</b>	<b>31,26,000</b>	<b>7,95,100</b>	<b>2,04,200</b>	<b>1,57,900</b>	<b>46,300</b>	<b>5.21</b>	<b>5.05</b>	<b>5.32</b>

4.18 It would be observed from the foregoing tables that the total number of persons in the country with graduate degree, post-graduate degrees, professional degrees and technical diplomas or certificates not equal to graduate degree enumerated during the 1971 Census were 35,14,300 in urban areas 4,06,800 in rural areas; the total for rural and urban areas being 39,21,100. As against this, the total stock of technical personnel in early 1971 estimated by the CSIR(given in table 1) was 31,08,900. Assuming that the sub-category of "other non-workers" roughly correspond to the unemployed among these personnel, the ratio of this sub-category among the total stock varies from 1.38% for the agriculture and veterinary graduates to 6.28% among the technical personnel with diploma or certificate. For rural areas, this percentage was 8.21% for persons with degrees and 11.85% for persons with diploma or certificate. The percentages were generally higher for females than for males.

4.19 In the resume, it may be stated that according to the CSIR estimates in early 1971, the total stock of graduates and technical personnel was 31,09,300. According to the Census enumeration on the basis of individual slips, it was observed to be 39,21,100.

4.20 The number of unemployed persons according to the CSIR estimates on the basis of the special Census enumeration 1971 was 4,21,284. According to the individual slip enumeration, the number of other non-workers among the technical personnel and graduates was 2,04,200. At the end of 1970 (31st December, 1970), the number of technical personnel and graduates registered with employment exchange was 2,76,538, out of which a sizeable percentage would already be employed and registered for better jobs.

**ANNEXURE-I**

*State-wise percentages of workers & non-workers with subsidiary activity of "other non-workers" \* and of their total to the population by sex and rural, urban residence (1971 Census)*

Sl. No.	States	Sex	Total			Rural			Urban					
			"Workers", with Subsi- diary Activity	Non- workers with work- ers", Subsi- diary Activity	"Other Total workers", with Subsi- diary Activity	Non- workers with work- ers", Subsi- diary Activity	"Work- ers", Non- workers with work- ers", Subsi- diary Activity	"Work- ers", Non- workers with work- ers", Subsi- diary Activity	Non- workers with work- ers", Subsi- diary Activity	"Other Total workers", with work- ers", Subsi- diary Activity	"Other Total workers", with work- ers", Subsi- diary Activity			
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Andhra Pradesh	P	41.68	1.37	0.31	43.36	44.52	1.59	0.19	46.30	29.83	0.44	0.84	31.11	
	M	57.75	0.10	0.51	58.36	60.20	0.10	0.30	60.60	47.68	0.10	1.36	49.14	
	F	25.24	0.67	0.11	28.02	28.59	3.10	0.07	31.76	11.05	0.55	0.29	11.89	
2. Assam	P	28.63	0.04	0.65	29.32	28.47	0.04	0.59	29.10	30.41	0.04	1.26	31.71	
	M	48.90	0.01	1.00	49.91	48.77	0.02	0.91	49.70	50.14	1.01	1.87	52.02	
	F	6.15	0.06	0.26	6.47	6.31	0.05	0.25	6.61	4.25	0.07	0.44	4.76	

Note (i) \*This includes the residual category of non-workers who reported to be seeking work and were not classified in the other specific categories of non-workers viz. students, household workers, ventiers, pensioners, beggars and vagrants and dependents etc.....

(ii) P-Persons, M-Males and F-Females.

The figures in the Table are based on the data given in the Provisional Population Tables Census of India-1971, Paper I of 1971 (Supplement) issued by the Registrar General India.

and

B—Series (Economic Tables 1971 Census available through the Courtesy of the Registrar General, India.)

ANNEXURE-I—*Contd.*

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1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
3. Bihar . . P	31.96	0.03	0.72	32.71	32.25	0.03	0.61	32.89	29.34	0.01	1.79	31.14		
M	52.40	0.01	1.28	53.69	52.96	1.00	1.07	54.03	47.80	0.01	3.02	50.83		
F	10.58	0.05	0.14	10.77	11.00	0.04	0.13	11.17	6.42	0.03	0.26	6.71		
4. Gujarat . . P	31.58	0.58	0.41	32.57	33.14	0.68	0.20	34.02	27.61	0.33	0.94	28.88		
M	51.17	0.06	0.74	51.97	52.77	0.05	0.36	53.18	47.19	0.09	1.67	48.95		
F	10.65	1.13	0.06	11.84	12.51	1.07	0.04	13.62	5.74	0.58	0.13	6.45		
5. Haryana . . P	26.51	0.02	0.60	27.13	26.53	0.01	0.55	27.09	26.42	0.06	0.83	27.31		
M	46.93	0.01	0.93	47.87	47.09	0.00	0.85	47.94	46.24	0.04	1.26	47.54		
F	3.17	0.05	0.22	3.44	3.17	0.78	0.20	4.15	3.17	0.09	0.31	3.57		
6. Himachal Pradesh P	36.82	0.12	0.56	37.50	37.00	0.13	0.50	37.63	34.38	0.05	1.36	35.79		
M	51.77	0.04	0.85	52.66	51.53	0.04	0.78	52.35	54.54	0.00	1.74	56.28		
F	21.46	0.20	0.26	21.92	22.37	0.21	0.22	22.80	7.51	0.10	0.87	8.48		
7. Jammu & Kash- mir . . P	30.01	0.38	0.25	30.64	30.67	0.39	0.16	31.22	27.06	0.08	0.91	28.05		
M	52.19	0.04	0.49	52.72	53.21	0.40	0.40	53.61	47.27	0.02	1.52	48.81		
F	4.86	0.67	0.08	5.61	5.17	0.77	0.06	6.00	3.45	0.15	0.21	3.81		
8. Kerala . . P	28.91	0.37	1.84	31.12	29.30	0.37	1.64	31.31	26.93	0.40	2.86	30.19		
M	44.44	0.10	2.58	47.12	44.66	0.10	2.30	47.06	43.33	0.15	3.96	47.44		
F	13.68	0.63	1.12	15.43	14.29	0.63	0.99	15.91	10.50	0.70	1.75	12.91		
9. Madhya Pradesh P	37.30	0.77	0.45	38.52	39.08	0.86	0.31	40.25	28.17	0.25	1.13	29.55		
M	53.83	0.05	0.72	54.60	55.42	0.05	0.48	55.95	46.04	0.05	1.88	47.97		
F	19.77	1.53	0.16	21.46	22.01	1.72	0.14	23.87	7.62	0.47	0.26	8.35		

10.	Maharashtra .	P	37.21	0.95	0.74	38.90	39.60	1.24	0.33	41.17	31.95	0.28	1.66	33.89
	M	51.87	0.07	1.32	53.26	52.49	0.06	0.62	53.17	50.62	0.10	2.72	53.44	
	F	21.49	1.88	0.13	23.50	26.56	2.14	0.33	29.03	9.16	0.50	0.37	10.03	
11.	Mysore .	P	35.17	0.36	0.28	35.81	36.93	0.41	0.14	37.48	29.69	0.21	0.71	30.61
	M	54.37	0.07	0.44	54.88	56.50	0.06	0.22	56.78	47.96	0.06	1.10	49.12	
	F	15.15	0.67	0.10	15.92	16.82	0.78	0.05	17.65	9.70	0.38	0.28	10.36	
12.	Nagaland .	P	52.09	0.00	0.14	52.23	52.31	0.00	0.15	52.46	50.09	..	..	50.09
	M	56.16	0.00	0.11	56.27	54.26	0.00	0.12	54.38	69.30	..	..	69.30	
	F	47.42	0.00	0.17	47.59	50.22	0.00	0.18	50.39	8.09	..	..	9.08	
13.	Orissa .	P	31.64	1.47	0.34	33.45	31.74	1.55	0.31	33.60	30.56	0.53	0.62	31.71
	M	55.44	0.16	0.62	56.22	55.93	0.16	0.58	56.67	50.42	0.15	1.07	51.64	
	F	7.58	2.78	0.06	10.42	7.62	2.93	0.05	10.60	7.10	3.63	0.08	10.81	
14.	Punjab .	P	28.81	0.01	0.36	29.18	29.05	0.01	0.29	29.35	28.01	0.02	0.60	28.63
	M	52.50	0.01	0.59	53.10	53.47	0.01	0.48	53.96	49.42	0.01	0.94	50.37	
	F	1.67	0.01	0.10	1.78	1.26	0.01	0.07	1.34	3.01	0.02	0.20	3.23	
15.	Rajasthan .	P	32.22	0.22	0.23	32.67	33.49	0.25	0.13	33.86	26.25	0.15	0.68	27.08
	M	52.13	0.03	0.39	52.55	53.80	0.03	0.23	54.06	54.49	0.04	1.15	45.68	
	F	10.42	0.46	0.04	10.92	11.47	0.48	0.03	11.98	5.40	5.05	0.13	10.58	
16.	Tamil Nadu .	P	36.67	0.51	0.93	38.11	39.21	0.67	0.48	40.36	30.83	0.16	1.95	32.94
	M	55.96	0.04	1.41	57.41	58.37	0.05	0.70	59.12	50.53	0.03	3.02	53.58	
	F	16.96	1.01	0.43	18.40	19.88	1.31	0.26	21.45	10.10	0.30	0.83	11.23	
17.	Uttar Pradesh .	P	32.16	0.02	0.40	32.58	32.77	0.01	0.33	33.11	28.41	0.05	0.84	29.30
	M	52.80	0.01	0.62	53.43	53.55	0.00	0.49	54.04	48.41	0.00	1.40	49.80	
	F	8.78	0.04	0.15	8.97	9.52	0.02	0.15	9.69	4.07	0.09	0.17	4.33	

ANNEXURE I—Concl'd.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
18. West Bengal . P	28.37	0.05	0.97	29.39	27.69	0.06	0.53	28.28	30.45	0.02	2.31	32.78		
M	48.89	0.02	1.65	50.56	48.54	0.02	0.91	49.47	49.87	0.02	3.72	53.61		
F	5.36	0.08	0.20	5.64	5.54	0.10	0.13	5.77	4.74	0.01	0.44	4.29		
19. Andaman & Nicobar . P	39.39	1.48	0.43	41.30	37.83	1.79	0.11	39.73	44.69	0.35	1.52	46.56		
M	61.84	0.29	0.71	62.84	60.49	0.37	0.19	61.05	66.10	0.01	2.37	68.48		
F	4.53	3.32	..	7.85	4.09	3.92	..	8.01	6.19	1.06	..	7.25		
20. Chandigarh . P	33.40	0.04	0.62	34.96	35.23	0.00	..	35.23	39.21	0.04	0.69	33.94		
M	53.66	0.01	0.95	54.62	57.46	0.00	..	57.46	53.26	0.00	1.05	54.31		
F	6.35	0.09	0.18	6.62	3.33	0.00	..	3.33	6.65	0.13	0.19	6.97		
21. Dadra & Nagar Haveli . P	47.16	7.55	0.13	54.84	47.16	7.55	0.13	54.84	..	..	..	..	..	
M	55.43	1.35	0.27	57.05	55.43	1.35	0.27	57.05	..	..	..	..	..	
F	38.95	13.70	..	52.65	38.95	13.70	..	52.65	..	..	..	..	..	
22. Delhi . P	30.27	0.03	0.90	31.20	26.31	0.01	1.03	27.35	30.72	0.04	0.88	31.64		
M	50.41	0.03	1.36	51.80	43.92	0.21	1.74	45.87	51.14	0.03	1.31	52.48		
F	5.15	0.05	0.33	5.53	5.32	0.05	0.16	5.53	5.13	0.05	0.35	5.53		
23. Goa, Daman & Diu . P	31.72	1.34	1.71	34.77	31.66	1.51	1.80	34.97	31.90	0.85	1.46	34.21		
M	47.53	0.30	2.84	50.67	46.53	0.35	2.98	49.86	50.17	0.17	2.44	52.78		
F	15.73	2.37	0.59	18.69	17.16	2.70	0.66	20.44	11.45	1.59	0.38	13.42		
24. L.M. & A. Islands . P	26.11	10.56	0.13	36.80	26.11	10.56	0.13	36.80	..	..	..	..	..	
M	38.48	2.37	0.12	40.92	38.43	2.37	0.12	40.92	..	..	..	..	..	
F	13.54	18.94	0.13	32.61	13.54	18.94	0.13	32.61	..	..	..	..	..	

25.	Manipur . .	P	35.92	0.41	0.36	36.69	37.05	0.06	0.31	37.42	28.55	0.00	0.64	29.18
	M	45.68	0.02	0.45	46.15	46.71	0.03	0.34	47.08	38.93	0.00	1.12	40.05	
	F	26.00	0.10	0.26	26.36	27.22	0.11	0.28	27.61	18.00	0.09	0.14	18.14	
26.	Meghalaya . .	P	44.92	0.09	0.16	45.17	46.91	0.22	0.07	47.20	31.61	0.00	0.78	32.39
	M	53.36	0.02	0.22	53.60	54.34	0.02	0.14	54.30	47.08	0.00	0.74	47.82	
	F	36.06	0.17	0.10	36.33	39.20	0.43	..	39.63	14.08	0.00	0.83	14.91	
27.	NEFA . .	P	57.30	0.00	4.32	61.62	57.75	0.00	3.69	61.44	43.24	0.00	23.81	67.05
	M	61.39	0.00	6.35	67.74	61.40	0.00	5.53	66.93	61.12	0.00	26.95	88.07	
	F	52.80	0.00	2.08	54.88	53.80	0.00	1.69	55.49	11.12	0.00	18.16	29.28	
28.	Pondicherry . .	P	30.11	0.38	1.02	31.51	33.29	0.47	0.99	34.75	25.73	0.26	1.06	27.05
	M	48.49	0.00	1.77	50.26	51.66	0.01	1.81	53.48	44.11	0.00	1.71	45.82	
	F	11.55	0.66	0.26	12.57	14.65	0.96	0.15	15.76	7.29	0.51	0.40	8.20	
29.	Tripura . .	P	27.93	0.06	0.44	28.43	28.27	0.06	0.32	28.65	23.94	0.00	1.89	25.83
	M	49.22	0.00	0.81	50.03	49.90	0.00	0.60	50.50	41.15	0.00	3.33	44.48	
	F	5.28	0.12	0.05	5.45	5.26	0.13	0.03	5.42	5.42	0.00	0.34	5.76	
30.	ALL INDIA . .	P	33.54	0.44	0.60	34.59	34.53	0.51	0.41	35.45	29.56	0.19	1.36	31.11
	M	52.53	0.04	0.98	53.55	53.55	0.04	0.66	54.25	48.62	0.05	2.18	50.85	
	F	13.15	0.91	0.20	14.26	14.55	1.00	0.15	15.70	7.37	0.36	0.39	8.12	

**ANNEXURE-II**

*State-wise percentages of workers, of persons seeking work and total number of persons with work and seeking work to total population by sex, and rural-urban residence (1961 Census)*

Sl. No.	State	Sex	Rural			Urban			Total		
			Workers	Persons Seeking Work	Total (4+5).	Workers	Persons Seeking Work	Total (7+8)	Workers	Persons Seeking Work	Total (10+11) Work
1. Andhra Pradesh	P	P	55.22	0.07	55.29	35.98	0.60	36.58	51.87	0.16	52.03
		M	64.32	0.13	64.45	52.40	1.10	53.50	62.22	0.30	62.52
		F	45.99	0.01	46.00	18.74	0.07	18.81	41.32	0.02	41.34
2. Assam	P	P	43.79	0.34	44.13	37.00	0.59	37.59	43.28	0.35	43.63
		M	53.98	0.49	54.47	55.36	0.92	56.28	54.10	0.52	54.62
		F	32.41	0.17	32.58	9.88	0.10	9.98	30.91	0.17	31.08
3. Bihar	P	P	42.16	0.10	42.26	33.22	0.78	34.00	41.40	0.16	41.56
		M	56.00	0.19	56.19	51.74	1.35	53.09	54.40	0.30	55.90
		F	28.49	0.01	28.50	10.40	0.07	10.47	27.12	0.02	27.14
4. Gujarat	P	P	44.96	0.13	45.09	29.88	0.89	30.77	41.08	0.32	41.40
		M	55.30	0.24	55.54	48.37	1.66	50.03	53.47	0.62	54.09
		F	34.15	0.01	34.16	8.84	0.04	9.28	27.89	0.01	27.90

5.	Jammu & Kashmir	P	45.31	0.13	45.44	30.17	0.72	30.89	42.79	0.23	43.02	
		M	59.28	0.24	59.52	50.78	0.92	51.70	57.83	0.36	58.19	
		F	29.51	0.01	29.52	5.78	0.47	6.25	25.63	0.09	25.72	
6.	Kerala	.	P	33.97	0.89	34.86	29.56	1.76	31.32	33.31	1.02	34.33
		M	47.42	1.43	48.85	45.98	2.81	48.79	47.20	1.64	48.84	
		F	20.88	0.36	21.24	13.00	0.69	13.69	19.71	0.41	20.12	
7.	Madhya Pradesh	.	P	55.19	0.03	55.22	34.94	0.38	35.32	52.29	0.08	52.37
		M	61.58	0.05	61.63	52.44	0.67	53.11	60.21	0.14	60.35	
		F	48.60	0.01	48.61	14.50	0.03	14.53	43.99	0.01	44.00	
8.	Tamil Nadu	.	P	49.63	0.17	48.80	34.41	1.14	35.55	45.57	0.43	46.00
		M	62.19	0.32	62.51	53.16	2.09	55.25	59.74	0.80	60.54	
		F	37.11	0.02	37.13	14.95	0.14	15.09	31.29	0.05	31.34	
9.	Maharashtra	.	P	52.42	0.13	52.55	36.43	1.28	37.71	45.22	0.45	45.67
		M	58.07	0.24	58.31	54.83	2.17	57.00	57.92	0.82	58.74	
		F	46.74	0.02	46.76	13.45	0.16	13.61	32.02	0.05	32.07	
10.	Mysore	.	P	48.76	0.06	48.82	34.05	0.68	34.73	45.47	0.20	45.67
		M	60.40	0.11	60.51	51.57	1.20	52.77	58.38	0.36	58.74	
		F	36.79	0.00	36.79	14.87	0.11	14.98	32.04	0.03	32.07	
11.	Orissa	.	P	44.07	0.09	44.16	37.51	0.59	38.10	43.64	0.14	43.78
		M	61.02	0.17	61.19	57.22	1.02	58.24	60.76	0.23	60.99	
		F	27.39	0.00	27.39	13.12	0.04	13.16	26.58	0.01	26.59	

NOTE : The figures in the Table are based on the data available in General Economic Tables, Part II-B (i) and (iii)-Census of India, 1961 issued by the Registrar General, India.

In Column No. 3, P Stands for Persons, M for Males and F for Females.

ANNEXURE-II—Contd.

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1	2	3	4	5	6	7	8	9	10	11	12
12. Punjab . . . P	36.17	0.22	36.39	30.18	0.68	30.86	34.97	0.31	35.28		
M	53.44	0.40	53.84	50.93	1.17	52.10	52.92	0.56	53.48		
F	16.50	0.01	16.51	4.70	0.07	4.77	14.20	0.02	14.22		
13. Rajasthan . . P	50.92	0.03	50.95	30.34	0.33	30.57	47.55	0.08	47.63		
M	60.13	0.06	60.19	48.04	0.58	48.62	58.14	0.14	58.28		
F	40.82	0.01	48.83	10.05	0.06	10.11	35.89	0.02	35.91		
14. Uttar Pradesh . . P	40.33	0.06	40.39	30.96	0.51	31.47	39.12	0.12	39.24		
M	59.20	0.11	59.31	51.74	0.91	52.65	58.19	0.22	58.41		
F	19.90	0.01	19.91	5.34	0.02	5.36	18.14	0.01	18.15		
15. West Bengal . . P	32.67	0.58	33.25	34.66	2.63	37.29	33.16	1.08	34.24		
M	53.46	1.04	54.50	55.38	4.08	59.46	53.98	1.86	55.84		
F	10.62	0.09	10.71	5.11	0.56	5.67	9.43	0.19	9.62		
16. Andaman & Nicobar Islands . . P	50.56	0.12	50.68	43.90	0.97	44.87	49.09	0.31	49.40		
M	64.27	0.19	64.46	66.17	1.50	67.67	67.80	0.49	68.29		
F	22.42	0.01	22.43	5.07	0.04	5.11	18.75	0.02	18.77		
17. Delhi . . . P	35.97	0.68	36.65	31.65	0.86	32.51	32.13	0.84	32.97		
M	47.82	1.23	49.05	52.80	1.41	54.21	52.25	1.39	53.64		
F	21.98	0.02	22.00	4.46	0.14	4.60	6.51	0.13	6.64		
18. Himachal Pradesh . . P	60.70	0.08	60.78	37.66	0.50	38.16	59.61	0.10	59.71		
M	63.47	0.13	63.60	56.44	0.81	57.25	63.11	0.16	63.27		
F	57.74	0.03	57.77	11.93	0.06	11.99	55.83	0.03	55.86		

19.	Laccadive, Minicoy & Amindivi Islands.	P	51.64	..	51.64	..	..	51.64	..
		M	51.60	..	51.60	..	..	51.60	..
		F	51.68	..	51.68	..	..	51.68	..
20.	Manipur	.	46.37	0.10	46.47	40.71	1.43	42.14	0.21
		M	47.93	0.18	48.11	40.99	2.57	43.56	0.40
		F	44.86	0.01	44.87	40.43	0.28	40.71	0.03
21.	Tripura	.	39.4	0.16	39.52	27.39	0.94	28.35	0.23
		M	55.2	0.29	55.53	46.84	1.54	48.38	0.40
		F	22.4	0.02	22.42	5.46	0.25	5.71	0.04
22.	Dadra & Nagar Haveli	P	60.03	NA	60.03	..	..	60.03	..
		M	62.04	NA	62.04	..	..	62.04	..
		F	57.94	NA	57.94	..	..	57.94	..
23.	Goa, Daman & Diu	P	42.51	0.12	42.63	34.32	0.16	34.48	0.13
		M	51.77	0.23	52.00	48.75	0.29	49.04	0.24
		F	33.96	0.02	33.98	20.04	0.03	20.07	0.02
24.	Pondicherry	.	40.04	0.84	0.88	29.47	1.37	30.84	37.49
		M	57.13	1.65	4.78	48.74	2.70	51.44	55.14
		F	22.96	0.03	22.99	11.20	0.10	11.30	20.07
25.	NEFA	P	67.60	..	67.60	..	..	67.60	..
		M	80.99	..	80.99	..	..	80.97	..
		F	17.21	..	17.21	..	..	17.21	..
26.	Nagaland	.	60.69	0.02	60.71	35.76	0.32	36.08	59.40
		M	61.04	0.03	61.07	52.13	0.43	52.56	60.50
		F	60.34	0.00	60.34	9.68	0.16	9.84	58.44
27.	All India	.	45.07	0.17	45.24	33.48	1.03	34.51	42.98
		M	58.22	0.30	58.52	52.40	1.76	54.15	57.12
		F	31.42	0.04	31.46	11.09	0.16	11.25	27.96

**ANNEXURE-III**

*State-wise percentages of the total unemployed persons population as per 1961 Census and percentage of 'other non-workers' to population as per 1971 Census*

**56**

Sl. No.	State	Sex	Total		Rural		Urban	
			Persons Seeking Work (1961)	Other Non-workers (1971)*	Persons Seeking Work (1961)	Other Non-workers (1971)*	Persons Seeking Work (1961)	Other Non-workers (1971)*
1	2	3	4	5	6	7	8	9
1. Andhra Pradesh . . . . .	P	0.16	0.31	0.07	0.19	0.60	0.84	
	M	0.30	0.51	0.13	0.30	1.10	1.36	
	F	0.02	0.11	0.01	0.07	0.07	0.29	
2. Assam . . . . .	P	0.35	0.65	0.34	0.59	0.59	1.26	
	M	0.52	1.00	0.49	0.91	0.92	1.87	
	F	0.17	0.26	0.17	0.25	0.10	0.44	
3. Bihar . . . . .	P	0.16	0.72	0.10	0.61	0.78	1.79	
	M	0.30	1.28	0.19	1.07	1.35	3.02	
	F	0.02	0.14	0.01	0.13	0.07	0.26	
4. Gujarat . . . . .	P	0.32	0.41	0.13	0.20	0.89	0.94	
	M	0.62	0.74	0.24	0.36	1.66	1.67	
	F	0.01	0.06	0.01	0.04	0.04	0.13	
5. Jammu & Kashmir . . . . .	P	0.23	0.25	0.13	0.16	0.72	0.91	
	M	0.36	0.49	0.24	0.40	0.92	1.52	
	F	0.09	0.08	0.01	0.06	0.47	0.21	

6.	Kerala	.	.	.	P	1.02	1.84	0.89	1.64	1.76	2.86
		M	1.64	2.58		1.43	2.30	2.81	3.96	3.96	
		F	0.41	1.12		0.36	0.99	0.69	1.75	1.75	
7.	Madhya Pradesh	.	.	.	P	0.08	0.45	0.03	0.31	0.38	1.13
		M	0.14	0.72		0.05	0.48	0.67	1.88	1.88	
		F	0.01	0.16		0.01	0.14	0.03	0.26	0.26	
8.	Maharashtra	.	.	.	P	0.45	0.74	0.13	0.33	1.28	
		M	0.82	1.32		0.24	0.62	2.17	2.72	2.72	
		F	0.05	0.13		0.02	0.33	0.16	0.37	0.37	
9.	Mysore	.	.	.	P	0.20	0.28	0.06	0.14	0.68	1.66
		M	0.36	0.44		0.11	0.22	1.20	1.10	1.10	
		F	0.03	0.10		0.00	0.05	0.11	0.28	0.28	
10.	Orissa	.	.	.	P	0.14	0.34	0.09	0.31	0.59	0.62
		M	0.23	0.62		0.17	0.58	1.02	1.07	1.07	
		F	0.01	0.06		0.00	0.05	0.04	0.08	0.08	
11.	Punjab	.	.	.	P	0.31	0.36	0.22	0.29	0.68	0.60
		M	0.56	0.59		0.40	0.48	1.17	0.94	0.94	
		F	0.02	0.10		0.01	0.07	0.07	0.20	0.20	
12.	Rajasthan	.	.	.	P	0.08	0.23	0.03	0.13	0.33	0.68
		M	0.14	0.39		0.06	0.23	0.53	1.15	1.15	
		F	0.02	0.04		0.01	0.03	0.06	0.13	0.13	

Note :—(i)\*This includes the residual category of non-workers who reported to be seeking work and were not classified in the other specific categories of non-workers viz., students, household workers, rentiers, beggars and vagrants and dependents etc.

(ii) In Column No. 3, "P" stands for Persons, "M" for Males and "F" for Females.

ANNEXURE-III—*Contd.*

1	2	3	4	5	6	7	8	9
13. Uttar Pradesh	..	..	P	0.12	0.40	0.05	0.33	0.51
			M	0.22	0.62	0.11	0.49	0.91
			F	0.01	0.15	0.01	0.15	0.02
14. West Bengal	..	..	P	1.08	0.97	0.58	0.53	2.63
			M	1.86	1.65	1.04	0.91	4.08
			F	0.19	0.20	0.09	0.13	0.56
15. Tamil Nadu	..	..	P	0.43	0.93	0.17	0.48	1.14
			M	0.80	1.41	0.32	0.70	2.09
			F	0.05	0.43	0.02	0.26	0.14
16. Andaman & Nicobar	..	..	P	0.31	0.43	0.12	0.11	0.97
			M	0.49	0.71	0.19	0.19	1.50
			F	0.02	..	0.01	..	2.37
17. Delhi	..	..	P	0.84	0.90	0.68	1.03	0.86
			M	1.39	1.36	1.23	1.74	1.41
			F	0.13	0.33	0.22	0.16	0.14
18. Himachal Pradesh	..	..	P	0.10	0.56	0.08	0.50	0.50
			M	0.16	0.85	0.13	0.78	0.81
			F	0.03	0.26	0.03	0.22	0.06
19. L. M. & A. Islands	..	..	P	..	0.13	N.A.	0.13	N.A.
			M	..	0.12	N.A.	0.12	N.A.
			F	..	0.13	N.A.	0.13	N.A.

20.	Manipur	•	•	•	•	•	P	0.21	0.36	0.10	0.31	1.43	0.64
		M	0.40	0.45	0.18	0.34						2.57	1.12
		F	0.03	0.26	0.01	0.28						0.28	0.14
21.	Tripura	•	•	•	•	•	P	0.23	0.44	0.16	0.32	0.94	1.89
		M	0.40	0.81	0.29	0.60						1.54	3.33
		F	0.04	0.05	0.02	0.03						0.25	0.34
22.	Dadra & Nagar Haveli	•	•	•	P	•		0.13	N.A.	0.13	N.A.	..	
		M	•	•	M	•		0.27	N.A.	0.27	N.A.	..	
		F	•	•		•		N.A.	..	N.A.	..	..	
23.	Goa, Daman & Diu	•	•	•	P	0.13	1.71	0.12	1.80	0.16	1.46		
		M	0.24	2.84	0.23	2.98						0.29	2.44
		F	0.02	0.59	0.02	0.66						0.03	0.38
24.	Pondicherry	•	•	•	P	0.97	1.02	0.84	0.99	1.37	1.06		
		M	1.90	1.77	1.65	1.81						2.70	1.71
		F	0.05	0.26	0.03	0.15						0.10	0.40
25.	NEFA	•	•	•	P	•	4.32	N.A.	3.69	N.A.	23.81		
		M	•	•	M	•	6.35	N.A.	5.53	N.A.	26.95		
		F	•	•		•	2.08	N.A.	1.69	N.A.	18.16		
26.	Nagaland	•	•	•	P	0.03	0.14	0.02	0.15	0.32	..		
		M	0.05	0.11	0.03	0.12						0.43	..
		F	0.00	0.17	0.00	0.18						0.16	..
27.	Haryana	•	•	•	P	N.A.	0.60	N.A.	0.55	N.A.	0.83		
		M	N.A.	0.93	N.A.	0.85	N.A.	..	N.A.	1.26			
		F	N.A.	0.22	N.A.	0.20	N.A.	..	N.A.	0.31			

ANNEXURE-III—*Contd.*

	1	2	3	4	5	6	7	8	9
28. Chandigarh	.	.	P M F	N.A. N.A. N.A.	0.62 0.95 0.18	N.A. N.A. N.A.	.. .. ..	N.A. N.A. N.A.	0.69 1.05 0.19
29. ALL INDIA	.	.	P M F	0.31 0.55 0.06	0.60 0.98 0.20	0.17 0.30 0.04	0.41 0.66 0.15	1.03 1.76 0.16	1.36 2.18 0.39

**ANNEXURE-IV**

*State-wise percentage of persons (15-59 yrs.old) seeking work to population in the corresponding age-group as per 1961 census and of "Other Non-workers" of the age group 15 to 59 to population in the age group 15-59 as per 1971 census*

Sl. No.	State	Sex	Total		Rural		Urban	
			Percentage of Persons Seeking Work as per 1961 Census	Percentage of Persons Seeking Non-workers as per 1971 Census	Percentage of Persons Seeking Work as per 1961 Census	Percentage of other Non-workers as per 1971 Census	Percentage of Persons Seeking Work as per 1961 Census	Percentage of other Non-workers as per 1971 Census
1	2		3	4	5	6	7	8
1.	Audhra Pradesh	•	•	•	M 0.54 0.03	0.83 0.13	0.23 0.02	0.48 0.08
2.	Assam	•	•	•	M 0.86 0.27	1.71 0.38	0.79 0.27	1.59 0.36
3.	Bihar	•	•	•	M 0.54 0.02	1.18 0.08	0.34 0.02	1.74 0.09
4.	Gujarat	•	•	•	M 1.09 0.02	1.26 0.08	0.43 0.01	0.43 0.04
							9	9

9	
1.93	
0.45	
2.30	
0.29	
6.61	
2.82	
2.88	
0.28	
4.10	
0.55	
1.75	
0.47	
..	..
1.60	0.16
1.28	0.31
1.83	0.19



15.	Tamil Nadu	.	.	.	M	1.34	3.02	0.53	0.99	3.46	4.72
					F	0.09	0.48	0.03	0.21	0.25	1.12
16.	Uttar Pradesh	.	.	.	M	0.39	0.80	0.20	0.58	1.53	1.98
					F	0.02	0.12	0.01	0.10	0.04	0.20
17.	West Bengal	.	.	.	M	3.13	2.76	1.81	1.54	5.99	5.42
					F	0.34	0.26	0.14	0.14	1.01	0.60
18.	Anadaman & Nicobar Islands	.	.	.	M	0.70	1.09	0.28	0.30	2.09	3.27
					F	0.03	..	0.02	..	0.08	..
19.	Chandigarh	.	.	.	M	N.A.	1.38	N.A.	..	N.A.	1.52
					F	N.A.	0.31	N.A.	..	N.A.	0.34
20.	Dadra & Nagar Haveli	.	.	.	M	..	0.53	N.A.	0.53	N.A.	..
					F	..	..	N.A.	..	N.A.	..
21.	Delhi	.	.	.	M	2.35	2.02	2.46	3.10	2.34	1.92
					F	0.25	0.50	0.05	0.21	0.27	0.53
22.	Goa, Daman & Diu	.	.	.	M	0.43	4.45	0.42	4.86	0.49	3.52
					F	0.04	0.86	0.04	0.92	0.05	0.66
23.	Himachal Pradesh	.	.	.	M	0.27	1.38	0.21	1.24	1.25	2.62
					F	0.04	0.37	0.04	0.29	0.11	1.53
24.	L.M. & A Islands	.	.	.	M	..	..	N.A.	..	N.A.	..
					F	..	2.27	N.A.	2.27	N.A.	..
25.	Manipur	.	.	.	M	0.75	0.75	0.36	0.54	4.41	2.01
					F	0.06	0.18	0.02	0.21	0.49	..

ANNEXURE-IV—*Contd.*

1	2	3	4	5	6	7	8	9
26. Arunachal Pradesh	.	M	N.A.	8.31	..	7.19	N.A.	25.83
		F	N.A.	2.81	..	2.10	N.A.	29.56
27. Pondicherry	.	M	3.07	2.91	2.64	3.01	4.46	2.76
		F	0.08	0.47	0.04	0.27	0.18	0.73
28. Tripura	.	M	0.76	1.48	0.54	1.17	2.69	3.84
		F	0.08	0.11	0.04	0.06	0.49	0.48
29. Meghalaya	.	M	N.A.	0.36	N.A.	0.22	N.A.	1.03
		F	N.A.	0.20	N.A.	..	N.A.	1.38
<hr/>								
TOTAL ALL INDIA	.	M	1.01	1.59	0.52	1.06	2.88	3.37
		F	0.10	0.25	0.06	0.17	0.29	0.57

\*This includes the residual category of non-workers who reported to be seeking work and were not classified in the other specific categories of non-workers viz. students, household workers, pensioners and vagrants and dependents, etc.

NB—(i) M = Male, F = Female  
(ii) N.A = Not available

## ANNEXURE-V

*Number and percentage of the person seeking work among the technical personnel—(1971 census—special enumeration)*

Name of the State	Number of Respondents		Number of Respondents Reporting to be Seeking Work		Percentage of Unemployed	
	Males	Females	Males	Females	Males	Females
1. Andhra Pradesh . . .	1,17,770	16,536	13,790	3,398	11.71	20.55
2. Assam . . .	48,212	8,271	5,009	2,200	10.39	26.60
3. Bihar . . .	1,17,969	10,990	29,040	2,912	24.61	26.49
4. Gujarat . . .	1,07,477	25,200	7,759	4,471	7.22	17.74
5. Haryana . . .	31,252	8,258	3,369	1,638	10.78	19.83
6. Madhya Pradesh . . .	1,27,399	25,023	11,799	4,574	9.19	18.28
7. Jammu & Kashmir . . .	12,749	2,822	1,524	717	11.95	25.41
8. Kerala . . .	94,411	39,424	17,317	10,913	18.34	27.68
9. Maharashtra . . .	2,16,114	61,584	11,955	7,487	5.53	12.16
10. Mysore . . .	1,17,079	21,687	14,124	4,602	12.06	21.22
11. Nagaland . . .	1,146	119	42	14	3.66	11.76
12. Orissa . . .	43,473	5,371	1,245	388	2.86	7.22
13. Punjab . . .	50,465	19,131	5,756	3,410	11.40	17.83
14. Rajasthan . . .	76,551	12,625	4,862	1,867	6.35	14.78
15. Tamil Nadu . . .	1,32,700	25,741	15,429	5,119	11.63	19.89
16. Uttar Pradesh . . .	2,23,036	51,317	20,545	6,474	9.21	12.62
17. West Bengal . . .	1,16,006	23,498	30,313	7,901	26.13	33.62
18. A. & N. Islands . . .	1,048	179	32	28	3.05	15.64
19. Chandigarh . . .	12,378	4,451	434	625	3.51	14.04
20. Dadra & Nagar Haveli . . .	117	16	5	5	4.27	31.25
21. Delhi . . .	98,319	39,093	8,274	8,977	8.42	22.96
22. Goa, Daman & Diu . . .	4,876	1,429	240	175	49.22	12.25
23. Himachal Pradesh . . .	14,316	2,970	896	433	6.26	14.58
24. L. M. & A. Islands . . .	181	32	1	6	0.55	18.75
25. Manipur . . .	3,931	537	569	148	14.47	27.56
26. N.E.F.A. . .	1,120	114	14	15	12.50	13.15
27. Pondicherry . . .	2,103	452	158	57	7.51	12.61
28. Tripura . . .	5,852	1,240	905	379	15.46	3.05
29. Meghalaya . . .	1,950	455	46	67	2.35	14.72

*Source : Data available through the courtesy of the Registrar General and Census Commissioner, India.*

**ANNEXURE-VI**

*Percentage of unemployed graduates and technical personnel according to subject field and sex  
(1971 census—special enumeration)*

Name of the State	Arts and Humanities		Commerce		Agriculture		Veterinary Science		Gen. Sc.		Engg. & Tech.		Medicine (All)		Nursing		Tech. Vocational Trade		Others		Total	
	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males	Males Fe-males	Females Fe-males
1. Andhra Pradesh	6.6	18.7	15.8	31.1	15.1	19.5	7.9	18.2	15.7	23.5	14.0	32.2	8.0	11.3	5.0	9.1	19.5	44.9	9.7	23.1	11.7	20.5
2. Assam	10.7	28.6	9.6	21.7	3.3	66.7	0.8	33.3	11.5	24.8	10.4	18.2	3.1	16.7	2.9	3.5	22.5	32.0	4.3	27.7	10.4	26.6
3. Bihar	25.7	27.5	44.1	18.8	17.3	0.0	10.8	40.0	31.4	26.2	17.5	21.5	6.1	12.3	7.6	3.5	43.0	16.7	14.5	15.1	24.6	26.5
4. Gujarat	5.5	18.2	9.7	19.2	4.3	0.0	1.2	100.0	11.9	19.9	7.0	9.1	2.2	5.1	0.0	3.4	6.4	12.9	5.6	13.3	7.2	17.7
5. Haryana	11.0	20.6	12.2	22.2	8.3	33.3	2.2	0.0	14.6	15.2	9.3	18.5	2.9	6.3	0.0	4.9	9.3	14.3	7.4	26.3	10.8	19.8
6. Jammu & Kashmir	7.5	25.8	12.6	33.3	4.8	50.0	1.0	..	26.7	3.0	10.6	15.4	3.1	6.7	..	8.9	0.0	6.5	27.6	12.0	25.4	
7. Kerala	12.8	25.6	22.0	40.4	8.1	34.6	10.4	28.0	22.5	32.5	27.0	34.5	6.8	10.8	4.8	3.5	39.7	50.7	23.0	38.6	18.3	27.7
8. Madhya Pradesh	7.4	18.6	12.7	23.3	7.7	12.5	0.6	0.0	13.0	19.5	12.9	16.8	4.1	7.6	0.0	3.5	13.9	31.3	5.4	14.3	9.2	18.3
9. Maharashtra	4.2	12.2	10.6	12.9	12.1	16.7	3.3	37.5	5.6	14.6	4.4	11.4	1.8	4.8	2.7	2.4	11.2	6.5	4.2	9.2	5.5	21.2
10. Mysore	8.6	20.0	11.8	25.6	7.2	20.8	2.3	9.5	14.5	24.2	16.1	17.6	6.7	7.5	5.3	10.8	8.6	30.8	7.1	17.9	12.1	7.2
11. Orissa	2.8	8.1	3.1	10.5	0.3	0.0	3.0	0.0	3.4	6.6	2.7	3.7	2.4	2.9	0.0	1.1	2.5	0.0	2.4	10.5	2.9	17.8
12. Punjab	10.9	18.4	9.5	4.5	7.6	8.3	1.7	14.3	17.1	15.0	12.4	15.5	2.7	4.9	..	5.0	13.2	32.8	10.5	24.6	11.4	14.8
13. Rajasthan	5.6	15.8	7.6	10.3	5.9	25.0	4.5	..	6.4	12.8	10.9	12.5	3.5	3.4	..	..	8.8	25.0	9.3	16.3	6.4	14.6
14. Tamil Nadu	10.9	19.9	10.2	27.8	0.6	3.6	0.5	8.3	15.3	22.3	10.5	22.6	2.1	4.1	3.2	5.5	19.5	37.3	11.9	16.7	11.6	19.9
15. Uttar Pradesh	8.2	13.3	7.9	5.3	17.1	12.9	4.7	8.8	11.6	15.5	9.7	18.4	2.9	4.7	5.6	..	10.5	34.5	6.2	14.5	9.2	13.2
16. West Bengal	24.8	34.8	28.8	32.4	18.0	20.0	2.6	..	27.7	28.5	30.7	30.0	3.4	8.2	..	2.8	37.3	47.4	11.6	12.0	26.1	33.6
17. Delhi	7.1	24.1	10.5	9.6	7.2	13.0	3.6	..	11.1	18.6	10.1	20.7	4.7	9.9	..	6.1	1.4	2.6	9.2	19.1	8.4	23.0
18. Himachal Pradesh	6.7	14.5	10.2	..	4.2	40.0	0.7	..	11.7	23.2	3.3	..	2.1	7.3	..	..	7.1	33.3	1.6	16.1	6.3	14.6
19. Meghalaya	3.0	16.5	3.0	..	2.0	..	..	..	2.5	12.1	0.9	..	..	..	..	..	..	..	..	..	2.4	14.7

(Source : Data available through the courtesy of the Registrar General, India.)

## ANNEXURE-VII (a)

*Average (Median) duration (in months) of the period of unemployment among graduates and technical personnel by sex and educational levels (census 1971; special enumeration)*

Name of the State	Doctorate			Master/Post-Grad.			Bachelor/Equivalent			Diploma			Certificate			Total Persons Males Females Persons Males Females Persons		
	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons	Males	Females	Persons			
1. Andhra Pradesh	19.0	27.4	25.0	12.0	16.7	12.4	12.3	14.1	12.5	12.8	12.6	12.9	16.3	19.0	16.7	12.3	14.4	12.5
2. Assam	..	..	..	12.4	16.9	14.1	18.2	22.8	19.6	18.9	27.2	19.2	26.5	29.0	30.9	17.9	22.1	19.9
3. Bihar	17.0	25.0	20.2	24.3	25.6	24.6	20.4	25.6	22.7	23.6	19.0	14.1	25.9	..	26.0	22.8	25.3	23.0
4. Gujarat	4.5	12.0	6.0	11.5	14.3	12.2	11.7	13.3	12.1	11.1	12.0	11.2	12.0	12.0	11.7	13.3	12.1	12.1
5. Haryana	..	13.0	7.0	10.0	13.6	11.7	10.6	12.6	10.9	12.5	10.4	12.3	19.0	29.0	25.0	10.7	12.7	11.2
6. Jammu and Kashmir	..	..	..	11.7	12.6	12.1	11.2	12.9	11.7	13.6	..	14.1	..	..	..	11.5	12.8	11.8
7. Kerala	16.0	19.2	18.3	12.3	13.6	14.0	11.9	12.3	15.6	18.8	20.1	17.0	21.8	23.0	22.2	12.5	11.7	19.2
8. Madhya Pradesh	11.7	26.3	17.0	12.7	19.0	14.5	13.0	16.8	13.9	16.5	19.7	16.5	25.7	25.0	26.6	9.9	17.7	11.1
9. Maharashtra	7.7	25.0	11.0	11.6	12.1	12.2	10.8	12.7	11.4	9.7	12.8	10.0	15.0	21.0	15.1	9.8	12.8	11.5
10. More	9.0	17.0	10.8	11.2	12.7	11.8	11.0	11.9	11.2	19.8	13.9	19.1	20.1	25.2	20.7	11.6	12.0	11.7
11. Nagaland	..	..	..	10.0	25.0	12.0	22.0	16.0	20.0	..	..	..	..	..	19.7	17.8	19.0	..
12. Orissa	..	..	..	10.8	11.1	10.9	11.8	12.9	11.9	14.1	11.0	8.1	22.0	12.0	21.0	4.7	4.2	4.6
13. Punjab	10.0	11.0	10.6	11.8	12.5	12.1	12.4	12.8	17.3	17.5	21.0	17.5	25.0	27.3	25.7	8.1	14.3	12.1
14* Rajasthan	13.0	25.0	19.0	12.8	16.0	15.2	7.9	13.2	12.6	13.0	13.0	13.0	25.0	..	25.0	17.0	12.8	12.8
15. Tamil Nadu	25.0	10.0	13.0	11.9	12.7	12.2	11.8	12.3	11.9	15.9	16.4	15.9	23.4	25.0	23.4	12.1	12.0	12.0
16. Uttar Pradesh	17.0	11.5	13.8	12.9	23.1	15.7	13.0	16.1	17.6	14.2	17.5	14.3	20.9	25.0	21.0	13.1	16.4	13.8
17. West Bengal	10.0	13.0	11.0	13.1	16.5	16.3	16.0	19.3	16.6	20.7	27.0	20.9	20.0	13.0	19.9	15.0	20.9	15.6
18. A. & N. Islands	..	..	..	25.0	25.0	10.0	10.4	11.0	9.0	..	11.0	12.0	..	12.0	10.2	25.0	12.1	..
19. Chandigarh	..	..	..	10.5	13.6	12.2	10.8	23.5	13.2	10.7	..	11.8	25.0	29.0	28.4	10.8	21.4	12.9
20. Dada & Nagarjuna Baveli	..	..	..	12.3	11.9	16.2	14.9	11.5	17.0	12.7	12.5	18.2	12.9	13.8	28.0	18.4	11.7	16.7
21. Delhi	12.3	13.0	12.3	11.9	16.2	14.9	11.5	17.0	12.7	12.5	18.2	12.9	13.8	28.0	18.4	11.7	16.7	13.0
22. Goa, Daman & Diu	..	..	..	10.3	19.0	11.7	10.2	11.0	10.5	..	..	..	..	..	..	10.4	11.3	10.7
23. Himachal Pradesh	..	..	..	11.3	15.7	12.7	10.7	13.6	11.3	10.5	28.0	11.0	19.0	..	16.0	10.8	15.4	11.5
24. L.M. & A. Islands	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
25. Manipur	..	..	..	11.6	11.9	14.7	18.9	14.0	18.1	..	..	..	..	..	17.7	12.9	16.7	..
26. NEFA	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
27. Puducherry	..	..	..	13.0	17.8	17.5	18.5	20.7	18.9	26.3	..	26.3	..	..	..	12.0	13.0	12.2
28. Tripura	..	..	..	16.4	25.7	20.2	7.4	22.1	14.9	..	..	..	..	..	..	13.0	22.6	15.4

(Source : Data available through the Courtesy of the Registrar General and Census Commissioner, India).

## ANNEXURE-VII (b)

*Average (median) duration (in months) of unemployment among graduates and technical personnel by sex  
subject fields and levels of education (1971 census—special enumeration)*

Level of Education	Total		Arts/ Humanities		Commerce		Agriculture		Veterinary Science/ Medicine		Science & Technology		Engineering		Medicine		Nursing		Others				
			M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21		
<b>A11 Levels of Education</b>	.	.	12.9	14.8	16.1	16.4	12.7	11.6	12.1	15.7	12.9	19.0	11.9	12.4	17.8	13.8	10.5	8.9	24.0	18.0	15.9	15.3	
<b>1. Doctorate</b>	.	.	12.0	15.1	17.3	21.4	..	..	..	..	11.0	..	..	10.6	16.0	5.5	..	11.8	10.0	..	..	15.2	7.9
<b>2. Master/Post Graduate</b>	.	.	13.1	16.9	16.7	17.9	12.9	12.4	10.0	10.0	11.0	..	11.7	13.9	10.0	12.0	9.7	7.0	..	..	11.1	14.3	
<b>3. Bachelor/Equivalent</b>	.	.	12.7	14.2	16.0	16.1	12.7	11.5	12.9	22.3	16.5	16.0	11.8	12.2	11.4	11.1	9.7	10.8	..	16.4	13.1	14.3	
<b>4. Diploma</b>	.	.	16.7	17.4	13.4	15.5	17.5	12.0	26.9	..	20.2	..	16.2	19.0	16.3	16.3	22.2	21.8	25.2	18.0	15.5	15.5	
<b>5. Certificate</b>	.	.	20.8	24.0	15.0	25.3	11.5	..	30.1	..	..	16.6	12.0	19.4	21.0	26.9	24.0	..	..	16.7	16.3	..	

*Source : Census of India—1971.*

G—Series Tables.

Degree Holders and Technical Personnel  
(Provisional)

## ANNEXURE-VII (c)

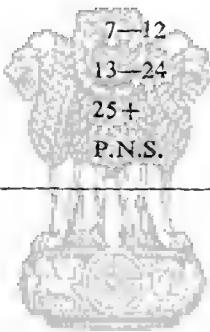
*Distribution of graduates and technical personnel seeking work by sex, levels of education and duration of the period of unemployment*

(1971 census—special enumeration)

Level of Education	Duration of Unemployment (Months)	Males	Females
		1	2
All Levels of Education . . . . .	Total	2,08,656	79,804
	0—6	24,730	5,302
	7—12	57,911	20,369
	13—24	36,507	11,513
	25+	45,935	17,727
	P.N.S.	43,573	24,893
1. Doctorate . . . . .	Total	351	243
	0—6	72	31
	7—12	65	52
	13—24	42	23
	25+	72	68
	P.N.S.	100	69
2. Master/Post-Graduate . . . . .	Total	24,444	15,376
	0—6	2,295	805
	7—12	7,266	3,810
	13—24	4,020	2,228
	25+	5,597	3,824
	P.N.S.	5,266	4,709
3. Bachelor/Equivalent . . . . .	Total	1,58,404	62,124
	0—6	19,350	4,301
	7—12	44,959	16,110
	13—24	27,684	8,960
	25+	32,835	13,255
	P.N.S.	33,576	19,498

ANNEXURE-VII(c)—*Contd.*

Level of Education 1	Duration of Unemployment (Months) 2		
		Males 3	Females 4
4. Diploma . . . . .	Total	20,040	1,478
	0— 6	2,415	132
	7—12	4,814	316
	13—24	3,801	222
	25 +	5,736	387
	P.N.S.	3,274	421
5. Certificate . . . . .	Total	5,417	583
	0— 6	598	33
	7—12	807	81
	13—24	960	80
	25 +	1,695	193
	P.N.S.	1,357	196



Satyameva Jayate

## SECTION-V

### Summary of State-wise Data

5.1 The available data from the sources indicated earlier in respect of different states on employment, unemployment, under-employment, labour force, etc., have been reviewed state-wise. The most recent estimates of unemployment and under-employment available from these reviews are summarised below in respect of individual states. These estimates are based on studies or surveys during different periods of time and have taken into consideration concepts and definitions specifically adopted for the studies in question. Due to these limitations, the data for different states cannot be pooled to arrive at all India estimates. The comparisons between different states will also not be valid because of the above limitations. For further details reference may be made to the appendix II to this report.

#### Andhra Pradesh

5.2.1 The 16th round of the State Sample of NSS indicated that 3.38 per cent males and 1.00 per cent females of the age group 15-59 in urban areas and 1.39 per cent males and 1.73 per cent females in rural areas were unemployed in 1960-61. For the State as a whole, the unemployed comprised 2.15 per cent males and 1.60 per cent females in the age-group of 15-59. On the basis of these rates of unemployment, it was estimated that the backlog of unemployment at the beginning of Third Plan was about 3.75 lakhs comprising 2.17 lakh males and 1.58 lakh females. The additional new entrants into the labour force during the Third Plan period were estimated at 12.50 lakhs. Thus a total of 16.34 lakh jobs were required for achieving full employment by the end of the Third Plan period. It was estimated that about 10.79 lakh jobs would have been generated during the Third Plan period. This would have left a backlog of 5.5 lakhs unemployed at the end of Third Plan period. (For details refer publication by the Department of Planning, Government of Andhra Pradesh).

5.2.2 The Government of Andhra Pradesh, Department of Planning, on the basis of certain assumptions, estimated that the number of

employable (*i.e.*, age group 15-59) will be 23.74 million in 1971. The relevant estimates are given in the table below :

*Estimates of employable persons (*i.e.*, age group 15-59) in 1951 and 1971*  
(Figures in millions)

Year		Males	Females	Persons
1951	.	9.09	8.93	18.02
1956	.	9.59	9.40	18.99
1961	.	10.11	9.89	20.00
1966	.	11.02	10.77	21.79
1971	.	12.01	11.73	23.74

NOTE:—Estimates for 1966 were arrived by assuming a uniform compound rate of increase between 1951—61 and 1961—71 respectively.

5.2.3 The data collected on the urban labour force survey during the 20th and 21st rounds of NSS revealed that among the unemployed males 42.10 per cent were in search of employment for three months or less, 18.42 per cent between four to six months, 10.53 per cent between seven to nine months, 13.16 per cent between ten to twelve months and the remaining 15.29 per cent were looking for employment for more than a year. About 42.42 per cent of the unemployed males and 3.03 per cent of the females were registered with the employment exchanges.

5.2.4 Similarly, among unemployed males 32.7 per cent were illiterate, 46.7 per cent had studied upto secondary, 13.37 per cent secondary, 4.6 per cent graduates and above and 2.9 per cent had technical education. Among females 79.8 per cent were illiterates, 13.9 per cent studied upto secondary, 4.9 per cent secondary and 1.48 per cent had technical education.

### Assam

5.3.1 With a view to assessing the magnitude of the unemployment in the state, the Department of Economics and Statistics conducted a sample survey of urban unemployment in the year 1963. The survey covered all the towns of Assam State as per 1961 Census classification. The concepts and definitions adopted in the survey were, by and large, the same as followed by the NSS.

5.3.2 The reference period was the day of enquiry. Besides, three more reference periods were chosen, viz.

- (i) Any day during the week preceding the day of survey.
- (ii) The entire week preceding the day of survey.
- (iii) Any day during the month preceding the day of enquiry.

5.3.3. *Main findings* : (i) The urban population of the State was estimated at 10.83 lakhs — 3.96 lakhs (36.6%) employed, 0.15 lakh (1.4%) unemployed and 6.72 lakhs (62.2%) outside the labour force. The component of labour force was thus 4.11 lakhs with 96.3 per cent employed and 3.7 per cent unemployed.

(ii) Of the unemployed persons 20.4 per cent were illiterate, 11.2 per cent literate, 11.9 per cent primary education, 22.8 per cent middle standard and 14.0 per cent below matric, 11.1 per cent matric and 8.57 per cent Intermediate and above. Out of the total number of unemployed persons only 1.6 thousand, i.e., 10.3 per cent possessed technical qualifications.

(iii) About 74.6 per cent of the unemployed persons belonged to the age group 14—30 years and 12.1 per cent to the age group 30—45 years.

(iv) About 34.7 per cent of the unemployed were looking for work for more than one year, 13.0 per cent for eight to twelve months, 18.9 per cent for four to eight months and 22.7 per cent from one to four months.

(v) Of the 15.07 thousand unemployed persons, 13.70 thousand were actively looking for jobs, 0.23 thousand were not actively looking for jobs and the remaining 1.14 thousand were not intending to look for work though they were available for work. The unmarried persons of both sexes numbering 0.79 thousand predominated in the category of those who were not intending to look for work. The male married persons falling in this category were estimated at 0.23 thousand.

#### Bihar

5.4 Dearth of statistical data on employment and unemployment stands in the way of making any assessment. The available data are incomparable due to difference in concepts and reference periods and present a biased picture. However, the latest available data are given in the table below :

TABLE  
*Summary of data regarding unemployment*

Survey	Extent of Unemployment			Incidence of Unemployment		
	Rural	Urban	Total	Rural	Urban	Total
1971 Census . . .	0.61	1.79	0.72	1.84	5.75	2.21
1961 Census . . .	0.10	0.78	0.16	0.24	2.31	0.38
21st Round of NSS (1966-67)	N.A.	0.40	N.A.	N.A.	1.34	—
19th Round of NSS (1964-65)	1.88	—	N.A.	5.58	—	N.A.
25th Round of NSS (1970-71)						
Small cultivator households	2.8	—	—	6.59	—	—
Non-cultivating wage earner households	3.9	—	—	9.24	—	—

N.A.= Not available

**Gujarat**

5.5.1 The percentage of persons in the labour force to total population was 30.95 per cent in 1960-61 and 28.73 per cent in 1967-68, i.e., 16.45 lakhs in 1961 and 18.45 lakhs in 1968. Of the persons in the labour force, over 98 per cent employed. The employed population was about 16.14 lakh in 1961 and 18.13 lakh in 1968. In other words, during the seven year period 1961-68, there was an addition of about two lakh persons to the urban labour force, while the urban economy could provide employment to 1.99 lakhs persons, i.e., 98 per cent of the net addition.

5.5.2 The sex-wise distribution of the employed persons in 1961-68 was as given in table below :

**TABLE**  
*Employed persons in Gujarat in 1961 and 1968*

(figures in lakhs)

	1961	1968
<b>Male</b> . . . . . . . .	13.17	14.87
<b>Female</b> . . . . . . . .	2.97	3.26
<b>Person</b> . . . . . . . .	16.14	18.13

**Unemployed :**

5.5.3 The proportion of unemployed persons in the labour force was 1.87 per cent in 1961 and 1.81 per cent in 1968. The change in the educational characteristics of unemployed persons over the seven year period is given below :

Educational Standard	Percentages	
	1961	1968
Illiterate . . . . . . . .	32.95	9.82
Literate but below Primary . . . . . . . .	48.04	66.67
Primary but below Secondary . . . . . . . .		
Secondary . . . . . . . .	17.37	17.19
Graduate & above . . . . . . . .	1.64	6.32
	100.00	100.00

5.5.4 There has been a steep drop in the proportion of illiterates among the total unemployed which is largely set off by the increase in proportion of 'literates but below secondary'. The proportion of persons having passed S.S.C. and similar examinations but who were not graduate has remained stationary but there has been a sharp increase in the proportion of persons with graduate and higher qualifications seeking jobs.

5.5.5 Though the information on the number of days worked was not collected during the twenty second round of NSS (1967-68), the integrated household schedule canvassed in that round do provide data on labour time disposition. The proportion of employed persons at work by number of days worked as obtained for 1960-61 and estimated for 1967-68 is given in below :

No. of Days Worked in the Reference Week	Percentage of Employed Persons	
	1960-61	1967-68
Upto 3 days . . . . .	4.74	1.68
4 to 5 days . . . . .	10.36	8.15
More than 5 days . . . . .	87.30	91.85
Not recorded. . . . .	2.34	—

### Haryana

5.6.1 Adequate data are not available in respect of the prevailing unemployment and under-employment in the State. According to a rapid sample survey of the employment, unemployment and under-employment situation conducted in 1963 by the Economic and Statistical Organisation of the composite State of Punjab, the intensity of under-employment was found to be the highest in the rural areas of Gurgaon and Mahendragarh districts, being 46 per cent. However, these figures are very old and since then much progress has been made in the sphere of agriculture in the State.

5.6.2 The findings of the Economic and statistical Organisation, Government of Haryana based on sample survey conducted during November, 1969 and October, 1970 are given in the Table below :

#### *Percentage of under-employed persons in Haryana*

Particulars	Male	Female	Persons
1. Percentage of persons in labour force to Population. . . . .	43.00	18.37	31.48
2. Employed persons in the labour force :			
(i) as percentage of the population . . . . .	41.99	18.11	30.81
(ii) as percentage of the labour force . . . . .	97.65	98.59	97.90
3. Percentage of under-employed persons to the employed persons. . . . .	3.83	3.53	3.76

5.6.3. On the basis of the above figures it is estimated that in 1969-70, 24.9 lakhs of total rural population formed the effective labour force. It was constituted by 24.4 lakhs employed and 0.52 laks unemployed persons. Out of the employed persons in labour force 0.94 lakhs were under-employed.

5.6.4 According to the report on the 21st Round of National Sample Survey (1966-67) out of the total gainfully employed persons at work during the reference week 51.80 per cent worked for 56 hours or more and 36.17 per cent for 42 to 55 hours. Rest of the persons were engaged in work for less than 42 hours. The intensity of employment in terms of hours worked during the reference week was more in case of males than among females. However, there was practically no under-employment in urban areas as only about 0.57 per cent of the employed persons were reported to be available for extra work at the normal rate of remuneration. According to this, the number of employed persons amounted to 3.24 lakhs in the estimated population of 12.95 lakhs at that time. Out of them the number of under-employed persons was 18,470 roughly.

#### Himachal Pradesh

5.7.1 The available data on unemployment in Himachal Pradesh are given in the Table below :

Basis of the Data	Extent of Unemployment			Incidence of Unemployment		
	All Areas	Rural	Urban	All Areas	Rural	Urban
<b>1971 Census :</b>						
Male . . . . .	0·85	0·78	1·74	1·62	1·48	3·09
Female . . . . .	0·26	0·22	0·87	1·19	0·97	10·25
Persons . . . . .	0·56	0·50	1·37	1·50	1·33	3·82
<b>21st Round of NSS (1966-67)</b>						
Male . . . . .	N.A.	N.A.	Nil	N.A.	N.A.	Nil <sup>1</sup>
Female . . . . .	N.A.	N.A.	Nil	N.A.	N.A.	Nil
Persons . . . . .	N.A.	N.A.	Nil	N.A.	N.A.	Nil
<b>19th Round of NSS (1965-66)</b>						
Male . . . . .	N.A.	—	N.A.	N.A.	—	N.A.
<b>20th Round of NSS (1965-66)</b>						
Male . . . . .	N.A.	N.A.	1·36	N.A.	N.A.	2·1
Female . . . . .	N.A.	N.A.	Nil	Nil	Nil	Nil
Persons . . . . .	N.A.	N.A.	0·76	N.A.	N.A.	2·3

5.7.2 The NSS data are based on very inadequate sample size. They are based on the current activity status pertaining to a week while the 1971 Census figures are based on the data available in respect of persons categorised as 'Other non-workers' who included those not doing any work and reported to be seeking gainful employment. In 1971 Census no specific enquiry as such was made to ascertain unemployment.

No data are available in respect of under-employment.

#### Kerala

5.8.1 The most comprehensive information in respect of Kerala on unemployment and under-employment relates to the 16th Round of NSS in the rural areas and 21st Round of NSS in the urban areas. In addition, the 1965, a survey on unemployment was conducted by the State Statistical Bureau. The results are summarised in table No. A on page 86.

5.8.2 Some results emanating from the survey conducted by the State Statistical Bureau in 1965 are given in Tables B and C.

TABLE-B

*Incidence of unemployment by age-group and sex in rural areas of Kerala*

Age Group	Incidence of Unemployment			
	Male	Female	Persons	
0- 11 . . . . . . . . .	—	—	—	
12- 15 . . . . . . . . .	21.84	18.67	20.37	
16- 17 . . . . . . . . .	34.56	21.43	29.20	
18- 21 . . . . . . . . .	20.87	21.77	21.21	
22- 26 . . . . . . . . .	6.12	16.98	9.0	
27- 36 . . . . . . . . .	4.54	17.93	8.72	
37- 46 . . . . . . . . .	1.72	9.80	3.99	
47- 56 . . . . . . . . .	1.93	19.64	6.11	
57- 61 . . . . . . . . .	9.48	17.95	11.61	
62 & above . . . . . . . . .	9.41	31.32	14.10	
	TOTAL .	7.09	17.20	10.12

(NOTE.—Incidence of unemployment is the percentage of unemployed persons to the persons in the labour force in the different age groups.)

TABLE-A

*Unemployment in the urban areas of Kerala State (1960-61 to 1966-67)*

	NSS-16th Census 1961	NSS Round (State Sample) 1960-61	NSS 17th Round 1961-62	NSS 18th Round 1963-64	Survey by State Statistical Bureau 1965	NSS 19th Round 1964-65	NSS 20th Round 1965-66	NSS 21st Round 1966-67
<b>1. Number of unemployed :</b>								
(i) Persons . . . . .	44907	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
(ii) Male . . . . .	36081	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
(iii) Female . . . . .	8826	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.	N.A.
<b>2. Percentage of unemployed :</b>								
(i) To total population . . . . .	1.76	2.48	2.15	1.98	4.16	1.87	1.62	1.75
(ii) To male population . . . . .	2.81	2.86	3.15	2.70	4.74	2.40	2.29	1.32
(iii) To female population . . . . .	0.69	2.14	1.61	1.28	3.56	1.36	0.95	1.16
<b>3. Percentage of males among unemployed :</b>								
80.35	54.35	74.29	66.67	N.A.	64.11	70.89	67.04	
<b>4. Percentage of females among unemployed :</b>								
19.65	45.65	35.71	33.33	N.A.	35.89	29.11	32.96	
<b>5. Percentage of unemployed persons among :</b>								
(i) total labour force . . . . .	5.61	6.96	6.71	6.24	12.85	5.58	5.36	5.41
(ii) the male labour force . . . . .	5.76	6.10	6.25	5.56	10.20	4.96	4.96	4.84
(iii) the female labour force . . . . .	5.07	3.40	7.77	8.28	19.56	9.04	6.57	7.15

5.8.3 The distribution of unemployed persons by hours available for additional work given in Table 'C' below :

TABLE-C  
*Distribution of unemployed persons*

Hours in a Week	Percentage of Workers by Hours Worked			Percentage of Workers Available for Additional Work		
	Male	Female	All Persons	Male	Female	All Persons
0—14 . .	9.87	15.21	11.33	3.27	3.64	3.37
15—28 . .	16.48	21.71	17.91	8.82	11.00	9.42
29—42 . .	25.16	26.29	25.47	12.44	12.37	12.41
43—56 . .	29.85	26.09	28.82	5.00	4.05	4.81
57 and above . .	18.64	10.70	16.47	1.54	0.68	1.31
<b>TOTAL . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>31.16</b>	<b>31.74</b>	<b>31.32</b>

5.8.4 According to the above statement about 55 per cent of the workers worked for less than 42 hours in the reference week. Out of them one-fifth worked for less than 15 hours, and one third for 15 to 28 hours. But the percentage of such workers who sought additional work among the total workers was 25 only. Half of these were the workers who had worked for less than 28 hours during the week. The situation was worse among females. The report says that under-employment was most acute in Alleppey district where 42 per cent of the workers worked for less than 42 hours in the reference week and reported availability for additional work. The next in the order was Quilon district with 33.43 per cent of the workers reporting under-employment.

#### Madhya Pradesh

5.9.1 The available data about employment, unemployment and under-employment for Madhya Pradesh pertains to 1961 Census and 17th, 18th, 19th, 20th and 21st Rounds of the National Sample Survey for urban areas and for the 21st Round for the rural areas. These data are summarised in the following tables. In these data, the employed 'at work and employed not at work are given separately. The former category includes persons who work for at least one day during the seven days preceding the day of enquiry for salary, wages, remuneration or profit in a gainful occupation or as unpaid worker in the household enterprise. Persons employed but not at work include all those who have a job or enterprise from which they are temporarily absent during

the reference week for reasons such as illness, injury or otherwise physical disability, bad weather, strike or lockout, paid lay off, paid vacation for rest or recreation and other causes including social and religious necessitating absence from work. During the course of the 1961 Census, an attempt was made to obtain the number of unemployed persons, i.e., (i) seeking employment for the first time and (ii) employed before but now out of employment and seeking work.

**TABLE**  
*Number of persons unemployed aged 15 and above*  
(1961 Census)

(In Thousands)

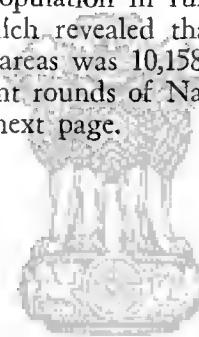
Age Group	Total Labour Force			Fresh Entrants		
	Persons	Males	Females	Persons	Males	Females
1	2	3	4	5	6	7
<i>Urban</i>						
15-34 . .	16.30	08.90	07.40	7.72	7.45	0.27
35+ . .	11.50	06.40	05.10	0.55	0.55	—
<b>TOTAL . .</b>	<b>27.80</b>	<b>15.30</b>	<b>12.50</b>	<b>8.27</b>	<b>8.00</b>	<b>0.27</b>
<i>Rural</i>						
<b>TOTAL . .</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Age Group	Others			Unemployed		
	Persons	Males	Females	Persons	Males	Females
8	9	10	11	12	13	
<i>Urban</i>						
15-34 . .	6.21	6.01	0.20	13.93	13.46	0.47
35+ . .	2.62	2.46	0.16	3.17	3.01	0.16
<b>TOTAL . .</b>	<b>8.83</b>	<b>8.47</b>	<b>0.36</b>	<b>17.10</b>	<b>16.47</b>	<b>0.63</b>
<i>Rural</i>						
<b>TOTAL . .</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>7.18</b>	<b>6.34</b>	<b>0.84</b>

5.9.2 Age distribution of unemployed persons including those below the age of 15 years is given below :

*Age distribution of unemployed persons, 1961 Census*

Age Group	No. of Unemployed Persons	Per- centages
0- 14 . . . . . . . . . .	1105	4.35
15- 34 . . . . . . . . . .	19573	77.10
35- 59 . . . . . . . . . .	4062	16.00
60+ . . . . . . . . . .	645	2.55

5.9.3 The National Sample Survey collected data about labour force component of the population in rural and urban areas in the 16th Round (1960-61) which revealed that the estimated number of unemployed in the urban areas was 10,158 and in rural areas 1,04,068. The data for the subsequent rounds of National Sample Survey are given in the table on the next page.



*Percentage distribution of urban population by sex and labour force status in Madhya Pradesh during various NSSS rounds*

NSS Round No.	Period	Employed						Unemployed					
		At Work			Not at Work			New Entrants			Other		
		M	F	P	M	F	P	M	F	P	M	F	P
1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Seventeenth Round	September, 1961 to July, 1962.	46.97	14.78	31.93	2.19	0.97	1.62	0.46	0.08	0.28	0.67	0.31	0.50
2. Eighteenth Round	February, 1963 to January, 1964	44.58	10.02	28.29	2.15	0.87	1.55	0.44	0.11	0.28	0.46	0.28	0.38
3. Nineteenth Round	July, 1964 to June, 1965	43.91	9.75	27.94	2.07	0.67	1.41	0.23	0.03	0.14	0.37	0.06	0.22
4. Twentieth Round	July, 1965 to June, 1966	43.03	10.92	28.17	2.19	0.67	1.49	0.33	0.03	0.19	0.45	0.13	0.30
5. Twenty-first Round	July, 1966 to June, 1967	45.89	11.73	29.87	1.33	0.55	0.96	0.32	0.08	0.20	0.23	0.12	0.18

*Percentage distribution of urban Population by sex and labour force status in Madhya Pradesh during various NSS rounds.—Contd.*

NSS Round No.	Period	Outside Labour Force						Not Recorded			TOTAL		
		M F P			M F P			M F P			M F P		
		1	2	15	16	17	18	19	20	21	22	23	24
1. Sixteenth Round	September, 1961 to July, 1962	49.28	82.90	64.99	0.43	0.96	0.68	100	100	100	100	100	100
2. Eighteenth Round	February, 1963 to January, 1964	49.59	86.25	66.87	2.78	2.47	2.63	100	100	100	100	100	100
3. Nineteenth Round	July, 1964 to June, 1965	53.15	89.20	70.01	0.27	0.29	0.28	100	100	100	100	100	100
4. Twentieth Round	July, 1965 to June, 1966	53.68	87.88	69.51	0.32	0.37	0.34	100	100	100	100	100	100
5. Twenty-first Round	July, 1966 to June, 1967	52.11	87.33	68.64	0.12	0.19	0.15	100	100	100	100	100	100

**Maharashtra**

5.10.1 The latest data available on unemployment and underemployment in the State of Maharashtra pertains to the 24th Round of the National Sample Survey.

5.10.2 In the 24th Round of the NSS, data on employment and unemployment (activity particulars) were collected in the 'Integrated household survey'. The data collected have been summarised and given below :

**Distribution of Population by Labour Force Status**

5.10.3. The percentage distribution of persons according to labour force status, age-groups and sex separately for rural and urban areas was as given in the table on next page.



Age Group	Rural						Urban					
	Employed			Unemployed			Employed			Unemployed		
	At Work		Not at Work		At Work		Not at Work		At Work		Not at Work	
	M	F	P	M	F	P	M	F	P	M	F	P
0—9 .	0.22	0.12	0.17				0.15	0.14	0.14	0.03	0.02	0.03
10—14 .	2.42	1.89	2.16	0.01	0.02	0.01	0.06	0.08	0.07	0.72	0.23	0.49
15—59 .	45.89	33.47	34.80	0.41	0.49	0.46	0.18	0.23	0.22	44.82	10.91	28.33
60+ .	3.04	0.91	1.99	0.05	0.04	0.04	—	0.02	0.01	1.98	0.49	1.28
TOTAL .	51.57	36.39	44.12	0.47	0.55	0.51	0.39	0.47	0.44	47.55	11.65	30.63

**5.10.4 Under-employment:** The percentage distribution of persons, reporting extra hours available for work by age-group and sex reportedly for rural and urban areas was as given in Table below :

Age Group	Rural			Urban		
	Males	Females	Persons	Males	Females	Persons
0— 9 . .	—	—	—	—	—	—
10— 14 . .	6.06	—	4.00	—	6.74	2.20
15— 59 . .	93.94	100.00	96.00	100.00	86.52	95.60
60+ . .	—	—	—	—	6.74	2.20
<b>TOTAL . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

**5.10.5 Duration of unemployment:** The urban labour force survey (18th round) undertaken in September, 1957 to May, 1958 revealed that forty-six per cent unemployed persons were unemployed for a period upto six months. The per cent of persons unemployed for more than six months and upto two years was 26. The unemployed persons who were unemployed for more than two years formed only seven per cent.

**5.10.6** Similar study made on the basis of the urban labour force survey conducted during July, 1960 to December, 1960 revealed that out of the total unemployed, nearly 41 per cent were found to be unemployed for more than a year, about 24 per cent were unemployed for 6 months to one year and the remaining about 35 per cent were unemployed for less than six months. As many as 75 per cent of the unemployed matriculates or intermediates (not graduates) were unemployed for more than 6 months while for graduate unemployeds the proportion was about 66 per cent. For unemployed persons with lower educational qualifications, the proportion of those, being unemployed for more than 6 months was smaller than the educated class, mentioned above.

**5.10.7** The latest data on unemployment for Maharashtra pertain to the 24th Round of NSS (1969-70). The results are given below :

		Rural	Urban
<b>1. Percentage of unemployed persons :</b>			
(i) to population	Male . . . . .	0.38	0.94
	Female . . . . .	0.47	0.25
	Persons . . . . .	0.44	0.62
(ii) to labour force	Male . . . . .	0.74	1.92
	Female . . . . .	1.26	10.37
	Persons . . . . .	0.98	1.96

### Mysore State

5.11.1 Number and proportion of Non-workers "Others" in the Population and Labour Force—1971 Census are given in the Table below :

		All State	Rural	Urban
1.	Number of persons classified as "Other non-workers"			
(i)	Persons . . . . .	81,400	30,900	50,500
(ii)	Males . . . . .	65,800	24,900	40,900
(iii)	Females . . . . .	15,600	6,000	9,600
2.	Percentage of "Other non-workers"			
(i)	to population . . . . .	0.28	0.13	0.71
(ii)	to labour force . . . . .	0.73	0.37	2.32
(iii)	to the male population . . . . .	0.44	0.22	1.10
(iv)	to the male labour force . . . . .	0.80	0.38	2.24
(v)	to the female population . . . . .	0.11	0.05	0.28
(vi)	in the female labour force . . . . .	0.68	0.31	2.73
(vii)	percentage of males among other non-workers . . . . .	80.83	83.17	80.99
(viii)	percentage of females among other non-workers . . . . .	19.17	16.83	19.01

Source : 1971 : Provisional Census Tables B Series—type sample obtained from the Registrar General, India.

5.11.2 The data available from the reports of the National Sample Survey are given in the table below. It may be mentioned that the persons of the age below 14 and above 60 had been excluded from the category of unemployeds in the NSS surveys.

#### *Extent and incidence of unemployment as per NSS*

NSS Round	Percentage of Unemployed Persons					
	To the Population			To the Labour Force		
	Persons	Males	Females	Persons	Males	Females
<i>Rural</i>						
19th Round (1964-65) . .	2.10	2.25	1.95	4.60	4.01	5.65
<i>Urban</i>						
17th Round (1961-62) . .	0.84	1.29	0.38	2.60	1.45	2.82
18th Round (1963-64 (State Sample) . .	0.46	0.74	0.16	1.66	1.60	2.14
(Central Sample) . .	0.44	0.69	0.17	1.35	1.41	1.16
19th Round (1964-65) (Rep. No. 163) . .	0.73	0.99	2.26	2.26	2.08	1.83
20th Round (1965-66) . .	0.61	0.78	0.43	2.04	1.67	3.69
21st Round (1966-67) . .	0.50	0.75	0.22	1.59	1.53	1.71

5.11.3 The NSS figures about the percentage of unemployed among the total population as well as labour force are bound to be more than the figures derived from the Census due to the criteria of current status during a smaller reference period of a week. It is, however, seen that the figures fail to indicate the rising or declining trend, perhaps due to very inadequate sample size. However, according to the 18th Round of NSS (State Sample) in 1963-64, out of the estimated urban population of 50,35,123 persons, the number of unemployed persons was 21,960.

5.11.4 The study group of the Planning Department of Mysore Government had calculated the backlog of unemployment at the end of Third Five Year Plan as 7.49 lakhs. The calculations made by them are given in the table below :

*Estimates of unemployment in Mysore made by the Planning Department of the State*

Backlog of unemployment at the beginning of the Second Plan (1956)	.	Rural 1.40 lakhs
		Urban 0.84 lakhs
		Total 2.24 lakhs
Addition in the labour force in the Second Plan	.	5.17 lakhs
Total jobs required	.	7.41 lakhs
Jobs created	.	4.10 lakhs
Backlog at the beginning of the Third Plan (1961)	.	3.31 lakhs
Addition in the labour force during Third Plan	.	9.80 lakhs
Jobs required	.	13.11 lakhs
Jobs created	.	5.62 lakhs
Unemployment at the end of the Third Plan (1965-66)	.	7.49 lakhs

*Source : Report of the Committee on Unemployment, Mysore Government—1971.*

On the basis of the above figures as well as the employment exchange data, the Committee on Unemployment set up by the Government of Mysore in October, 1970 estimated the magnitude of unemployment as follows in its report submitted in 1971 :

(A) (i) Educated unemployed	.	1.30 lakhs
(ii) Education below SSLC or no education	.	8.00 lakhs
	TOTAL	9.30 lakhs
(B) (i) Rural sector	.	7.74 lakhs
(ii) Urban sector	.	1.56 lakhs
	TOTAL	9.30 lakhs

Orissa

5.12.1 The broad findings in respect of unemployment and under-employment are furnished in the Table below :

*Latest available data on the extent of unemployment and under-employment in Orissa*

Source of Data	Particulars	All Areas	Rural	Urban
<i>A—Unemployment</i>				
1971 Census . . .	Percentage of 'other workers'			
	(i) to the total population . . .	0.34	0.32	0.62
	(ii) to the labour force . . .	1.02	0.94	2.56
24th Round of NSS (1969-70)	Percentage of unemployed persons			
	(i) to the total population . . .	0.41	0.40	0.44
	(ii) to the labour force . . .	1.21	1.20	1.36
<i>B—Under-employment</i>				
24th Round of NSS . . .	Percentage of under-employed workers (Persons who had work for less than 49 hours in the reference week)			
	(i) Male workers . . .	29.75	30.72	
	(ii) Female workers . . .	38.80	30.16	
Percentage of chronically under-employed workers :				
	(Persons who had work for less than 28 hours in a week)			
	(i) In the male working force . . .	6.19	2.71	
	(ii) In the female working force . . .	12.15	5.41	

5.12.2 The data, however, are inadequate and do not lead to any firm conclusions.

**Punjab**

5.13.1 The urban labour force surveys were introduced in the NSS 16th Round. Prior to that round, more detailed questions were asked for both the rural and the urban employed and unemployed enquiries. In view of the consideration that the economic activities in urban areas were likely to be more organised, a simplified set of questions was asked for the urban areas since the 16th Round of NSS.

5.13.2 The percentage distribution of urban population by labour force status as observed in the different rounds of NSS is given in the Table below :

Round No.	Sex	Employed		Unemployed		Outside Labour Force
		At Work	Not at Work	New Entrants	Others	
17th (Sept., 61-July, 62) .	M	43.73	1.24	0.40	0.52	52.28
	F	4.43	0.25	0.05	0.00	93.82
	P	26.17	0.80	0.24	0.29	70.85
18th (Feb., 63-Jan., 64) .	M	41.56	1.54	0.12	0.13	54.35
	F	3.51	0.31	—	—	92.30
	P	24.12	0.98	0.06	0.07	71.74
19th (July, 64-June, 65) .	M	45.94	1.07	0.18	0.16	52.08
	F	5.68	0.11	0.05	—	93.34
	P	27.31	0.62	0.12	0.09	71.18
20th (July, 65-June, 66)	M	40.37	0.41	0.34	0.34	58.54
	F	6.01	0.08	—	0.16	93.67
	P	24.82	0.26	0.19	0.26	74.43
21st (July, 66-June, 67)	M	46.62	0.45	0.20	0.19	52.53
	F	5.10	0.05	0.02	—	94.73
	P	27.56	0.27	0.12	0.10	71.90

**Rajasthan**

5.14.1 The NSS, since its 16th Round, have been undertaking urban labour force surveys throughout the country. The data on employment and unemployment are collected by following the labour

force approach. The data so collected and analysed are given in the Table below :

*Percentage distribution of urban population by labour force status sex under different rounds of NSS*

Round No.	Sex	Employed		Unemployed		Outside Labour force
		At Work	Not at Work	New Entrants	Others	
17th (Sept., 61-July, 62)	M	45.16	1.65	0.51	0.59	51.45
	F	12.81	0.46	0.13	0.07	85.97
	P	29.86	1.09	0.33	0.35	67.77
18th (Feb., 63-Jan., 64)	M	43.40	2.70	0.23	0.28	52.45
	F	10.16	0.56	0.08	0.15	87.40
	P	27.58	1.68	0.16	0.22	69.08
19th (July, 64-June, 65)	M	42.17	1.91	0.40	0.36	54.97
	F	11.32	0.71	0.07	0.07	82.62
	P	27.70	1.35	0.25	0.22	70.28
20th (July, 65-June, 66)	M	41.93	1.86	0.40	0.30	55.31
	F	14.28	0.50	—	0.02	84.72
	P	28.45	1.20	0.20	0.16	69.64
21st (July, 66-June, 67)	M	43.91	0.97	0.27	0.33	54.42
	F	16.03	0.61	—	0.06	83.22
	P	30.25	0.80	0.14	0.20	68.52

5.14.2 During the year (June, 1963 to May, 1964) 45.77% of the total rural population was in the labour force. Of the total labour force component, 79.86 per cent were fully employed, 17.78 per cent under-employed and 2.36 per cent unemployed. Thus the problem of unemployment was not very acute but that of under-employment was relatively serious. The number of persons in the labour force varied between 40.82 per cent of the total rural population in May, 1964 to 50.17 per cent in October, 1963.

#### Tamil Nadu

5.15.1 During the year 1969-70, the NSS conducted a survey on various aspects of the socio-economic conditions of the people in both urban and rural areas of the State. The results of the survey based on about 4,000 sampled households covering about 19,500 persons are given below. The results are provisional.

5.15.2 The data collected in respect of about 19,500 persons in regard to the labour force status have been summarised in the table given below :

*Percentage distribution of population by sex and labour force status in Tamil Nadu 1969-70*

**Percentages**

	Male	Female	Total	Male		Female		Total		Male	Female	Total
				Male	Female	Total	Male	Female	Total			
1. Labour force employed . . .	57.5	32.7	45.4	47.0	10.5	29.1	53.3	23.9	38.9			
2. Unemployed . . .	2.4	0.1	1.3	3.0	1.5	2.3	2.7	0.7	1.7			
TOTAL . . .	59.9	32.8	46.7	50.0	12.0	31.4	56.0	24.6	40.6			

5.15.3 About 45.4 per cent—57.5 per cent males and 32.7 per cent females—of the rural population and 29.1 per cent—47.0 per cent males and 10.5 per cent females—of the urban population were employed in gainful activities. Similarly, 1.3 per cent—2.4 per cent males and 0.1 per cent females—of the rural population and 2.3 per cent—3.0 per cent males and 1.5 per cent females—of the urban population were unemployed. For the State as a whole 38.9 per cent—53.3 per cent males and 23.9 per cent females—were employed while 1.7 per cent—2.7 per cent males and 0.7 per cent females were unemployed. Among males 53.3 per cent—(57.5 per cent in rural areas and 47.0 per cent in urban areas)—were employed and 2.7 per cent—(2.4 per cent in the rural areas and 3.0 per cent in urban areas)—were unemployed. The corresponding percentages for females were 23.9 per cent—(32.7 in rural areas and 10.5 per cent in urban areas)—employed and 0.7 per cent—(0.1 per cent in rural areas and 1.5 per cent in urban areas)—unemployed.

5.15.4 The data collected with regard to the educational attainments of the unemployed persons are summarised and given in the table below :

*Percentage distribution of unemployed persons by educational standard*

		Educational Standard					Total
		Graduate & above	Matric	Literate but below Matric	Illiterate		
Rural . . . .		2.6	15.8	58.6	23.0		100.0
Urban . . . .		8.6	62.3	23.4	5.7		100.0
State . . . .		5.8	40.7	39.8	13.7		100.0

5.15.5 Among the unemployed in rural areas, 95.4 per cent were males and 4.6 per cent females. In urban areas, 67.4 per cent of the total unemployed persons were males and 32.6 per cent females.

For the State as a whole, among unemployed 80.4% were males and 19.6 per cent females. Literates but below matric in rural areas and under-graduates in urban areas constituted the bulk of the unemployed.

5.15.6 The urban labour force surveys were introduced in the NSS sixteenth round. The percentage distribution of urban population by labour force status and sex observed in the different rounds of NSS was as given below :

Round	Sex	Employed		Unemployed		Outside Labour Force
		At Work	Not at Work	New Entrants	Others	
17th (Sept., 61— July, 62)	Males	43.73	1.24	0.40	0.52	52.28
	Females	4.43	0.25	0.05	0.00	93.82
	Persons	26.17	0.80	0.24	0.29	70.85
18th (Feb., 62— Jan., 64)	Males	41.56	1.54	0.12	0.13	54.35
	Females	3.51	0.31	—	—	92.30
	Persons	24.12	0.98	0.06	0.07	71.74
19th (July, 64— June, 65)	Males	45.94	1.07	0.18	0.16	52.08
	Females	5.68	0.11	0.05	—	93.34
	Persons	27.31	0.62	0.12	0.09	71.18
20th (July, 65— June, 66)	Males	40.37	0.41	0.34	0.34	58.54
	Females	6.01	0.08	—	0.16	93.07
	Persons	24.82	0.26	0.19	0.26	74.43
21st (July, 66— June, 67)	Males	46.62	0.45	0.20	0.19	52.53
	Females	5.10	0.05	0.02	—	94.73
	Persons	27.56	0.27	0.12	0.10	71.90

### Uttar Pradesh

5.16.1 In 1971 Census the category "other non-worker" included persons who reported to be seeking work and had no gainful activity or could not be classified in the specific categories of non-workers. Their percentage to the population and to the persons in labour force is given in the table below.

*Percentage of other non-workers to population in labour force  
(1971 census)*

Particulars	State	Rural	Urban
<b>Percentage of other non-workers :</b>			
(i) to population . . . . .	0.40	0.33	0.84
(ii) to labour force . . . . .	1.23	0.99	2.88
(iii) to male population . . . . .	0.62	0.49	1.42
(iv) to male labour force . . . . .	1.16	0.90	2.80
(v) to female population . . . . .	0.15	0.15	0.17
(vi) to female labour force . . . . .	1.68	1.53	3.89
(vii) sex ratio of 'other non-workers'			
Male . . . . .	82.25	78.59	90.98
Female . . . . .	17.75	21.41	9.02

5.16.2 In 1961 Census, specific questions were put to ascertain the extent of unemployment. In the table below, the extent and incidence of unemployment according to that census are given.

*Extent and incidence of unemployment as per (1961 Census)*

Particulars	State	Rural	Urban
<b>Percentage of unemployed persons :</b>			
(i) to population . . . . .	0.12	0.06	0.51
(ii) to labour force . . . . .	0.30	0.14	1.62
(iii) to male population . . . . .	0.22	0.11	0.91
(iv) to male labour force . . . . .	0.37	0.18	1.72
(v) to female population . . . . .	0.01	0.01	0.02
(vi) to female labour force . . . . .	0.06	0.04	0.43
(vii) of males among unemployed . . . . .	95.59	93.68	97.99
(viii) of females among unemployed . . . . .	4.41	6.32	2.01

5.16.3 The results of the two censuses are however, not comparable owing to the difference in approach.

5.16.4 Data on unemployment according to the NSS rounds are given in the Table below :

*NSS data on the extent and incidence of unemployment by sex and region*

Area	Particulars of the NSS Rounds	Percentage of Unemployed Persons						
		To the Population			To the Labour Force			
		M	F	P	M	F	P	
(State Samples)								
Rural	23rd Round (1968-69)	0.04	0.04	0.04	0.38	0.22	0.11	
	19th Round (1964-65)	0.20	0.00	0.20	0.38	0.00	0.61	
Central Samples								
	19th Round (1964-65)	0.39	1.28	1.14	0.73	0.56	2.89	
Urban	(State Samples)							
	20th Round (1965-66)	0.24	0.01	0.14	0.51	0.26	0.52	
	19th Round (1964-65)	0.40	0.00	0.20	0.85	0.00	0.75	
	18th Round (1963-64)	0.34	0.00	0.20	0.71	0.00	0.73	
	16th Round (1960-61)	0.93	0.06	0.45	1.80	0.18	1.45	
	(Central Samples)							
	21st Round (1966-67)	0.33	0.04	0.20	0.67	0.57	0.66	
	20th Round (1965-66)	0.61	0.07	0.36	1.33	0.97	1.19	
	19th Round (1964-65)	0.71	0.15	0.45	1.44	2.05	1.47	
	18th Round (1963-64)	0.57	0.04	0.32	1.14	0.60	1.07	
	17th Round (1961-62)	1.15	0.10	0.67	2.27	1.39	2.19	

5.16.5 Planning Department of the Uttar Pradesh Government had estimated the number of unemployed persons as 21.20 lakhs at the end of the Third Plan (1966) and 23.04 lakhs at the commencement of the Fourth Plan in 1969. The calculations made are shown in the table below :

*Estimates of unemployment given by the planning department of Uttar Pradesh Government*

	(Figures in lakhs)		
	Second Plan (1955-61)	Third Plan (1961-66)	Fourth Plan (1969-74)
1. Backlog of unemployment at the beginning of the Plan period . . . . .	9.64	13.00	23.04
2. New entrants in labour force . . . . .	16.59	27.00	37.00
3. Total job requirements of the Plan period . . . . .	26.05	40.20	60.00
4. Target of employment during the Plan period . . . . .	Not fixed	21.50	N.A.
5. Anticipated achievement . . . . .	13.05	19.00	N.A.
6. Carry over of unemployment at the end of the Plan period . . . . .	13.00	21.20	—

*Source : A study of unemployment amongst educated persons in Uttar Pradesh (p. 7).*

**West Bengal**

5.17 The latest data in respect of employment, unemployment and under-employment in the State of West Bengal are available from a survey on the subject conducted in 1971 by the State Bureau of Economics and Statistics. Comparative information from a similar survey conducted in 1963 is also available. The results of these two surveys are reproduced below :

Sr. No.	Items	1963 (Survey)	1971 (Survey)
1.	Total number of unemployed persons being defined as having not even one day work during the reference week . . . . .	4.69 lakhs	5.93 lakhs
2.	Number of unemployed persons, a person being considered unemployed if he had no gainful work for 4 days or more during the reference week . . . . .	21.00 lakhs	27.00 lakhs
3.	Percentage of item 1 above to the total population	1.24	1.56
4.	Percentage of the illiterate persons among those shown in item 1 . . . . .	49.00	35.00
5.	Percentage of the literate below matriculate or equivalent standard among those shown in item 1 . . . . .	37.00	42.00
6.	Percentage of matriculate and above but below graduate standard . . . . .	11.00	14.00
7.	Percentage of graduates among those in 1 above	3.00	9.00
8.	Estimated number of persons having full-time employment . . . . .	1,03,99,000	1,21,88,000
9.	Percentage of employed persons to the total population . . . . .	27.47	27.43

Sd/-  
(ASHOK MITRA)  
*Chairman*

NEW DELHI  
*Dated : the 25th November, 1972.*

Sd/-  
(S. C. CHAUDHRI)  
*Member*

Sd/-  
(A. CHANDRA SEKHAR)  
*Member*

Sd/-  
(H. R. SHARMA)  
*Secretary*

## SECTION-VI

### Summary of Conclusion and Recommendations

#### (PART—I)

It would be extremely difficult to develop a composite picture of aggregate level of unemployment on the basis of current data. The quality of data is uneven and the comparability between different sets of data is largely vitiated. Partly this is also the consequence of different concepts having been used in defining the relevant categories. While, under certain circumstances and under given assumptions, it may be possible to use the available data over a period for assessing the extent of relative shifts in the incidence of unemployment, little can be said about its absolute incidence at any particular point of time. (Para 1.3)

2. The Panel does not feel it necessary to deploy disproportionately large resources in search of precise data in this area. It is in the nature of the Indian economy that unemployment often assumes a disguised form, and given the disparate levels of social, economic, cultural and educational developments, it would be in the nature of will-o'-the wisp to try to have precise measures of the various forms of unemployment in different parts of the country. (Para 1.4)

3. It would be worthwhile to await the detailed results of the 27th round of the National Sample Survey and of the subsequent rounds—which could be expected to provide a large volume of systematic data, comparable to each other on a continuous basis. The permanent Commission, recommended in the context of the fifth term of reference, may operate as a continuing agency for providing the necessary guidance for assessing the incidence and magnitude of unemployment in terms of agreed concepts and measures. (Para 1.4)

4. In view of the criticism levelled against these concepts and definitions to the effect that these may be more relevant to the advanced countries, a need for evolving concepts and definitions suitable for Indian conditions particularly in rural areas was obvious.

(Para 2.26)

5. In delimiting the basis of disaggregation due notice be taken of the fact that the unemployment situation in India is beset with social and political overtones and strong cultural prejudices for/or against certain types of employment, activities, or works.

It would, therefore, be useful to lay emphasis, in any scheme of disaggregation, on socio-cultural, political and economic factors of

the population as also on the aspirations and job preferences of the unemployed and the under-employed persons. The studies carried out by the National Sample Survey regarding the economically weaker sections of population during the 25th round is a step in this direction. There is scope, however, for further and more frequent studies to determine the following :

- (i) demographic characteristics of different segments of the labour force;
- (ii) their educational attainments and other professional and technical training or experience;
- (iii) their present state of employment and its assessment with reference to the above background; and
- (iv) their attitude towards employment, the cultural conditioning and inhibitions, if any.

(Para 2.30)

6. These data, it is felt, will help in formulating the programme of employment generation, in planning supply against demand for different types of personnel or programmes of work and working out plans aiming at transforming the social and cultural values in keeping with the socio-economic aspirations of the country. Some of the disaggregations could no doubt be fitted into sample surveys or large scale investigations, but others would call for type studies.

(Para 2.31)

7. There also seems to be need for assessing the impact of changes in educational levels, socio-cultural background, emergence of new technology on unemployment and under-employment so as to plan the programmes of employment on a more realistic basis. As certain type of activities or traditional professions suffer a decline, a section of the labour-force would be rendered surplus. An assessment of the magnitude of this section would be required to plan avenues of employment for those involved.

(Para 2.32)

8. There is also need for more specific and extensive study of the causal factors which influence the participation rates of different groups of population. This information will assist in making reasonably meaningful projections for the future.

(Para 2.33)

9. The Dantwala Committee had recommended the retabulation of the National Sample Survey's past data so that disaggregated estimates of unemployment and under-employment could be obtained. The possibilities of getting these retabulations done were also explored. On reconsideration of the issues involved, it was felt that the effort involved in going back to the past data might not be worthwhile.

The Panel feels that the National Sample Survey as a source of data has great potential for the development of the entire statistical structure of manpower planning and for study of employment and unemployment in the country and should be fully exploited.

(Paras 3.2 & 3.3)

10. Sample studies of the registrants on the live register in association with the NSS enquiries can provide valuable information.

(Para 3.4)

11. An integrated approach to the study of the problem of unemployment and under-employment calls for a suitable set-up which is not available at this time. The adequate exploitation of the sources of data could not be possible through *ad hoc* arrangements or short-term efforts. The Panel has attempted to suggest a suitable machinery in the form of a Department of Manpower Planning and Employment and the National Commission on Manpower and Employment. The enormous amount of detailed analysis of the data and a variety of studies to be taken up for building up a suitable statistical base can only be taken up by the proposed Commission. The Panel is convinced of this after reviewing the data available, the studies carried out by various organisations from time to time, the studies taken up by the Government agencies, sponsored by the Planning Commission and also by the Committee on Unemployment. Therefore, the arrangements for continuous and long-term study of the problem should be made as an integral part of the Government machinery, to begin with, at the national level. The lines along which further action can be taken and the details thereof would, however, be the function of the proposed Commission.

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(Para 3.9)

12. It is felt that among the sub-category "other non-workers" of 1971 Census, the males in the age-group 15-59 might approximate to the number of unemployed males in the said age-group. The same cannot, however, be said of the females.

(Para 4.8)

13. The total number of persons in the country with graduate degrees/post-graduate degrees, professional degrees and technical diplomas or certificates not equal to graduate degree enumerated during the 1971 Census were 35,14,300 in urban areas and 4,06,800 in rural areas, the total for rural and urban areas being 39,21,100. As against this, the total stock of technical personnel in early 1971 estimated by the Council of Scientific and Industrial Research was 31,08,900. Assuming that the sub-category of "other non-workers" roughly correspond to the unemployed among these personnel, the ratio of this sub-category among the total stock varies from 1.38% for the agriculture and

veterinary graduates to 6.28% among the technical personnel with diploma or certificate. For rural areas, this percentage was 8.21% for persons with degree and 11.85% for persons with diploma or certificate. The percentages were generally higher for females than for males.

(Para 4.18)

14. The most recent estimates of unemployment and under-employment available from a review of the data from different sources in respect of individual states has been attempted in this section. These estimates are based on data from different sources, particularly, from studies or surveys pertaining to different periods of time and have taken into consideration concepts and definitions specifically adopted for the studies in question. With these limitations, the data for different states cannot be pooled to arrived at all-India estimates. The comparisons between different states will also not be valid because of these limitations.

(Para 5.1)



**Appendices to Part I  
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## APPENDIX-I

### *Review of Research Studies*

A large number of studies have been carried out by different organisations and individual research workers during the last two decades on the quantitative aspects of the problem of unemployment. The literature is too voluminous to be covered adequately in any single short review. Reports on about 60 such studies became available to the Panel. Some of these studies are based on NSS data from the various rounds or on data from the employment exchanges. Such of these studies as were only of a descriptive nature have been ignored. All told, 42 studies are reviewed and summarised in this Section of the Report.

#### **1. A pilot study of field labourers co-operative societies in Andhra Pradesh, 1964** objectives :

- (i) the administration of the societies and their efficiency;
- (ii) the technical and financial assistance extended to the societies and their members;
- (iii) some aspects of agricultural production on the lands assigned to members; and
- (iv) some features of the socio-economic condition of the members of the societies.

#### **Coverage :**

The study was limited to 17 Field Labourers Cooperative Societies in Andhra region of Andhra Pradesh. The societies were selected in consultation with the Registrar of Cooperative Societies as typical of the Societies of the respective districts. No society was selected from Telengana as there was no movement of this type in these areas.

#### **Period of the study :**

The study was conducted during the eight months ending on 31st March, 1961.

#### **Main conclusions :**

(i) The average size of the land per member was only 1.44 acres. It could not provide adequate employment for the members of the households. It required only 171.41 standard working days per household per year. This was supplemented by work on other farms and in non-agricultural pursuits. On an average, 27.02% of the working days were spent on the home farm, 39.79% on other farms and 33.19% in non-agricultural pursuits.

Employment on the home farm was slightly better in the regions where paddy was the principal crop as compared to the tracts where dry crops were grown. There was practically no difference in respect of aggregate employment in the joint farms (697 standard working days) and the tenant farms (691 standard working days). But employment in non-agricultural occupations was more at 76% in the case of joint farms, as compared to tenant farms, where employment in agriculture was better by about 69%.

(ii) The average income of a household was Rs. 1,025.48 of which 32.31% only was from agriculture. Average expenditure amounted to Rs. 983.50 of which food and clothing accounted for 81.89%. Income per capita was Rs. 189.90 and expenditure per capita Rs. 182.13.

The levels of average income and expenditure per household were higher in the joint farming societies at Rs. 1,241.00 and Rs. 1,283.00 respectively than in the case of tenant farming societies where the estimated average income per household was Rs. 959.00 and the expenditure was Rs. 891.00. The surplus position in the latter case was solely due to a low per capita expenditure of Rs. 162.00 per annum as against Rs. 249.00 in the former.

## 2. Survey of urban employment and unemployment in Assam (1955) by Gauhati University :

This is one of the studies sponsored by the Research Programme Committee of the Planning Commission.

### Objectives :

The object of the study was to collect factual data and throw light on the nature and extent of unemployment and under-employment as well as on the employment pattern.

### Coverage :

The coverage of the study was restricted to just six towns of Assam, i.e., Gauhati, Nowgong, Karimganj, Tinsukia, Sibsagar and Goalpara.

### Period of study :

The data were collected in respect of two reference periods, i.e., one on the day preceding the day of visit and the other for the past 12 months from the date of visit.

### Main findings :

(i) The percentage of persons sex-wise employed, unemployed and outside labour force as revealed from the study was :—

Sex	Employed	Unemployed	Labour Force	Outside Labour Force	Total
Males . . . . .	32.33	2.26	34.59	25.11	59.70
Females . . . . .	0.76	0.14	0.90	39.40	40.30
Persons . . . . .	33.09	2.40	35.49	64.51	100.00

(ii) The employment status of the employed persons was further studied under broad categories of employees, employers, apprentices, own account workers and unpaid family enterprise workers.

The percentage distribution of employed persons by employment status and sex-wise was :

Sex	Employees	Employers	Apprentices	Own Account Workers	Un-paid Family Workers	Total
Males . .	54·41	2·55	0·38	39·50	0·85	97·69
Females . .	1·65	0·02	—	0·59	0·05	2·31
Persons . .	56·06	2·57	0·38	40·09	0·90	100·00

The survey revealed that of the total persons covered 2.40% were unemployed while 64.51% were outside labour force. Unemployed covered all types of unemployment including involuntary, seasonal and frictional except voluntary unemployment.

(iii) The distribution of employed and unemployed persons as well as persons outside labour force by age groups was :

Age in Years	Employed	Unemployed	Outside Labour Force
0—15	3·23	12·38	57·63
16—20	9·79	21·17	12·11
21—25	17·27	36·48	8·07
26—30	19·49	15·96	5·74
31—35	15·32	5·86	3·39
36—40	11·61	2·61	2·81
41—45	8·26	2·28	1·92
46—50	7·15	1·96	1·77
51—55	3·54	0·98	1·19
Above 55	4·34	0·33	4·37
	100·00	100·00	100·00

(iv) The educational attainments both general and technical of the unemployed persons were also collected. The relevant details are furnished below :

*Distribution of unemployed persons by sex and education (general and technical)*

Education (General)	Males	Females	Persons
1. Illiterate . . . . .	10·42	0·33	10·75
2. Literate but below matriculation . . . . .	61·89	2·93	64·82
3. Matriculate but below graduate . . . . .	20·85	0·98	21·83
4. Graduate and above . . . . .	1·30	1·30	2·60
OVERALL . . . . .	94·46	5·54	100·00

Education (Technical)

1. No technical qualification or skill . . . . .	84·04	4·56	88·60
2. Technical qualification (without degree or diploma). . . . .	7·49	0·65	8·14
3. Technical qualification with degree or diploma . . . . .	2·93	0·33	3·26
OVERALL . . . . .	94·46	5·54	100·00

3. Report of the study group for tribal labour (Agricultural and Industrial), 1969 :

**Objective :**

The Study Group was set up by the National Commission on Labour in 1968 for undertaking a study of tribal labour—both industrial and agricultural—to collect relevant information with the help of a questionnaire and a proforma from the management of industrial enterprises in and around Ranchi, tribal factory and casual workers, trade unionists, social workers and local officials of the Labour Department.

**Findings :**

In Bihar, the number of scheduled tribes was 4.2 millions and constituted about one per cent of the total population of the country. The tribal population was heavily concentrated in the Chotanagpur belt and the Santhal Parganas district of Bhagalpur Division. Out of every 100 tribals in the State, Ranchi had 31, Singhbhum 23, Hazaribagh 6, Palamau 5 and Dhanbad 4. Thus the five districts of Chotanagpur accounted for 68 per cent of the tribal population. The proportion of the tribal population was the highest in Ranchi where the tribals constituted 61.6 per cent of the total population.

On the basis of their investigation it was found that out of every 1,000 scheduled tribes population in Ranchi, 919 were engaged in cultivation; of this 781 were recorded as cultivators, 96 as agricultural labourers and 42 as workers

in mining, quarrying, livestock, etc. Comparing this with the pattern of employment of the population of the Bihar State, 802 persons were in the primary sector, of which only 539 worked as cultivators, 230 as agricultural labourers and 34 in mining, quarrying, livestock, etc. It was, therefore, concluded that there was a very small percentage of tribal working population which had been recorded as agricultural labour. More than 3/4ths of the workers amongst the scheduled tribes worked as cultivators and only about 10 per cent worked as agricultural labourers. The percentage of the total State was over 23 per cent.

On the basis of the information collected from the different sources by the Study Group, it was found that employment for wages did not exceed 150 days in a year in Chotanagpur. The tribals had three alternatives to fill up this gap : (a) self-employment in the village or near it; (b) commute to towns or temporary work of casual nature; and (c) permanent seasonal migration to distant places in Bihar and outside. The Study Group was of the view that the tribals in Chotanagpur practised self-employment to an appreciably greater degree than agricultural labour of other Bihar districts. The proximity of forests gave them opportunity for self-employment in such occupations like collection of wood, fuel, herbs, grass and various products and engaged themselves in such household industries as rope-making, mat-making, etc.

#### **4. Pattern of employment of engineering graduates (1964-65) in Haryana by the Directorate of Employment :**

##### **Objective :**

The survey was undertaken primarily with a view to assigning the pattern of employment of graduates who passed out from the three engineering colleges located in the Joint Punjab (Chandigarh, Ludhiana and Patiala and the Department of Chemical Engineering, Punjab University).

The survey was confined to the graduates who passed out in the years 1964 and 1965. The choice of these two years was based on the object of finding the time lag between the students passing out of the college and their finding employment. The other object was to know as to how many of these graduates still remained unemployed.

##### **Method of data collection :**

The survey was conducted by mail questionnaire method. Main items of information included, among others, activity since obtaining degree, job satisfaction, etc.

##### **Period of survey :**

The survey was started before 1st November, 1966 and completed after Haryana had come into formation.

987 names and addresses of graduates were received from the three Engineering Colleges and the Department of Chemical Engineering, Punjab University. Of these, 502 graduates had passed during 1964 and 485 in 1965. Out of the 987 addresses, completed questionnaires were received from 256. Of these, 121 belonged to the 1964 and 135 to the 1965 batches. The percentage of individuals who responded to the number addressed was 26%. (24.1% and 27.8% respectively in 1964 and 1965).

The reference period is the date on which the graduates actually filled in the questionnaires.

### Concepts and definitions :

The term employed include all persons who were actually full time in employment on the date of reporting. Unemployed covered all those who were not in full time employment and were currently looking for a full time job on the day of reporting. A person who was neither employed nor looking for employment was regarded outside the labour force.

### Main findings :

At the time of survey, 83.1% of the engineering graduates were found employed, 8.2% reported being unemployed, 7.5% had taken up higher studies and 1.2% were engaged in family enterprises or started own business. Activity distribution is given below :—

Present Activity	Percentage of Graduates					
	Chem. Engg.	Aero. Engg.	Civil Engg.	Elect. Engg.	Mech. Engg.	Grand Total
Employed . . .	59.0	71.4	81.1	90.2	88.2	83.1
Unemployed . . .	4.6	..	12.6	4.9	7.4	8.2
Higher studies . . .	31.8	28.6	6.3	1.6	2.9	7.5
Not in labour force . . .	4.6	..	..	3.3	1.5	1.2
<b>TOTAL</b> . .	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

From the above table it will be seen that the highest percentage of employed graduates (90.2%) belonged to electrical engineering whereas the higher percentage of unemployment was among the civil engineers (12.6%).

### Percentage employment in relation to Class/Division secured

	I (Honours)	I %	II %	III %
Employed . . . . .	83.9	89.9	92.0	75.0
Unemployed . . . . .	..	4.5	8.0	25.0

From the above table it will be observed that the incidence of unemployment increased progressively from 4.5% among the first divisioners to 8% among 2nd divisioners and 25% among the third divisioners. There were no unemployed first divisioners with Honours. The employment figures show that 83.9% first divisioners with Honours, 89.9% first divisioners, 92% second divisioners and 75% third divisioners were employed.

The following table gives information about the proportion of unemployed graduates in each branch of engineering :

Name of Branch			Number of Unemployed	Percentage of Total Unemployed
Chemical Engg.	.	.	1	4.4
Aeronautical Engg.	.	.	..	..
Civil Engg.	.	.	12	52.2
Electrical Engg.	.	.	5	21.7
Mechanical Engg.	.	.	5	21.7
	TOTAL	.	23	100.0

Increase of unemployment was the highest among civil engineering graduates, whereas it was the same among the electrical and mechanical engineers.

#### *Percentage of employed graduates who found the job suitable not suitable*

		Percentage	
		Suitable	Not Suitable
Chemical Engg.	.	54.6	45.4
Aeronautical Engg.	.	60.0	40.0
Civil Engg.	.	44.3	55.7
Elect. Engg.	.	54.6	45.4
Mechanical Engg.	.	61.9	38.1
All branches	.	50.4	49.6

The proportion of graduates who expressed their satisfaction with their current state of employment was slightly higher among aeronautical and mechanical engineers (60% and 61.9%) than others. It was the lowest (44%) amongst the civil engineers.

#### *Duration of unemployment*

The following was the duration of unemployment :

#### *Percentage of graduates*

Period of unemployment	Chem. Engg.	Aero. Engg.	Civil Engg.	Elect. Engg.	Mech. Engg.	Grand Total
Below 6 months	100.0	..	37.5	33.3	84.6	65.4
6 to 12 months	..	..	50.0	33.3	7.7	23.1
12 to 18 months	..	..	12.5	33.4	7.7	11.5
Above 18 months	..	..	..	..	..	..
TOTAL	100.0	..	100.0	100.0	100.0	100.0

From the above table it would be observed that while 65% of the graduates had been without employment for less than six months of their passing the examination, 23% remained unemployed for 6 to 12 months and 12% from 12 to 18 months. There was none who remained unemployed for more than 18 months.

*No. of unemployed engineering graduates who were registered in Employment Exchanges*

Branch	No. Regd.	Percentage	No. not Regd.	Percentage	Total
Chemical Engg.	.	..	..	1	100.0
Aero. Engg.	.	..	..	..	..
Civil Engg.	.	8	66.7	4	33.3
Elect. Engg.	.	5	100.0	..	..
Mech. Engg.	.	1	20.0	4	80.0
<b>TOTAL</b>	.	<b>14</b>	<b>60.9</b>	<b>9</b>	<b>39.1</b>
					100.0

From the above table it will be seen that out of the total of 23 reported unemployed graduates, 14 i.e., 60.9 per cent were registered with the employment exchanges and the remaining 9 i.e., 39.1% did not seek assistance from these agencies.

### 5. Intensive-type studies on rural labour in Anantnag district (Jammu & Kashmir) :

#### Objectives :

- (i) To study the nature of employment, unemployment and underemployment in the selected regions of the country;
- (ii) to find out the extent to which the works projects programmes taken up by the Government and other agencies have provided employment opportunities in rural areas;
- (iii) to assess various welfare facilities already available to rural labour households under different welfare programmes, the extent to which these facilities are being availed of and to study the attitude of the beneficiaries to such programmes so far initiated; and
- (iv) to facilitate the formulation of appropriate action programmes necessary for improving conditions of employment and welfare facilities available to rural labour households.

#### Coverage :

The study was confined to three selected villages in the district. The three types of villages were defined and selected according to the following criteria :—

- (i) Type I villages being those situated in the proximity of industrial/ urban areas;
- (ii) Type II villages being those covered by the Rural Works Programme or Programmes of similar nature; and

- (iii) Type III villages being those not covered by the above two definitions and in which there was expectation of a high incidence of under-employment and unemployment.

Selection of these villages was made in consultation with the concerned State authorities. Selection of the villages of Type II in each region was made from the Development Blocks specially chosen for implementation of the Rural Works Programmes. For operational convenience, the village chosen was a revenue village and such villages which were compact in character were preferred to those which were divided into hamlets distinctly located from one another.

#### **Responsibility and direction :**

The responsibility for the planning and conduct of these studies rested with the Labour Bureau of the Ministry of Labour, Employment and Rehabilitation. However, a Technical Advisory Group was formed for advising the Labour Bureau on technical aspects of this and similar other districts.

#### **Period of enquiry :**

The enquiry in Anantnag Region was held during October, 1967 to September, 1968. The field work continued for a little more time for collection of the supplementary back-ground information at the block and district levels.

Although the study was designed as the diagnostic one and not as a sample survey, for making estimates relating to labour force characteristics and labour-time disposition at the village level it was considered necessary to resort to sampling. According to sampling design, 40 households were selected at random in a linear systematic manner from the list of labour households in each selected village and periodical data on labour force characteristics and labour time disposition of the working members belonging to the sample households were collected. The Investigators visited the sample households in the selected villages every month covering the villages in permuted cyclic order (*i.e.* 1, 2, 3 in the first month, 2, 3, 1 in the second month, 3, 2, 1 in the third month and so on) in order to obviate any possible bias arising from the intra-monthly cyclical effect.

For drawing the sample of rural labour households, all the households in the village were initially listed in order of geographical contiguity of location and the classification of a household as a labour household or non-labour household was also made at that time of listing.

While preparing the frames of labour households in each village, a further sub-classification between agricultural labour households and other rural labour households was made.

Those members of the sampled rural labour household found to be engaged on activities of a perennial nature were considered as fully employed. Members engaged in activities of a seasonal nature and could not find any employment during the off season though available were treated as 'seasonally unemployed'. If, however, they could find some employment during the off season, which, however, did not keep them fully busy, they were considered as 'seasonally under-employed'.

**6. Planning for Employment in Kerala by Bureau of Economics & Statistics, Kerala :**

**Objectives :**

(1) To ascertain the existing structure and composition of employment in the State,

(2) to assess the size and character of employment and under-employment in different sectors; and

(3) to study industrial and other developments of recent years and to suggest the specific directions in which from the aspect of expansion of employment opportunities along with the improvement of productivity, economic development plans for the Fourth and Fifth Plan periods could be re-oriented and strengthened.

**Sample design :**

2,000 households in each district were proposed to be surveyed, allocated among rural and urban sectors in proportion of their population. The sample design was made self-weighting. Each district was divided into 2 strata : (1) Rural and (2) Urban.

*Rural areas.*—3-stage sampling was adopted—panchayats—2 wards on an average from each panchayat—25 households—in an average in each of the wards.

*Urban area.*—Two-stage sampling was adopted—Municipalities or Corporation—households.

No. of households selected in a municipality or corporation—households.

No. of households selected in a municipality or corporation was divided by 25 to find out the No. of wards to be sampled. Voters lists of the selected wards were used to select households.

Thus about 0.6 per cent of total number of households were distributed in all nine districts of the State. The actual No. of households surveyed came to 17239.

**Concepts :**

*Households.*—A group of persons usually residing under the same roof and ordinarily taking food from the same kitchen.

*Employed.*—A person directly or indirectly employed in gainful work on at least one day during the reference week, irrespective of the hours of work put in was treated as employed. Persons having a job or enterprise but temporarily absent from it due to personal reasons such as illness, injury, paid vacation etc. were also considered as employed. Among the unemployed a person who worked 42 hours or less during the week and reported available for further work was treated as under-employed.

*Unemployed.*—A person in the age group of 15 to 49 without any gainful work during the reference week and either seeking or available for work.

*Labour force.*—The employed and unemployed together constituted the labour force.

**Broad findings :**

(1) The total population was estimated at 187.81 lakhs. 93.06 lakhs were males and 94.75 lakhs females—sex ratio being 1,018 females per 1,000 males.

**(2) Classification of the population by activity status and sex.**

Activity Status	No. of Persons (in lakhs)			Percentage Distribution		
	Male	Female	Persons	Male	Female	Persons
Employed . .	39.74	14.94	54.68	42.7	15.7	29.1
Unemployed . .	3.04	2.43	5.47	3.3	2.6	2.9
Not in labour force .	50.28	77.38	127.66	54.0	81.7	68.0
<b>TOTAL .</b>	<b>93.06</b>	<b>94.75</b>	<b>187.81</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(3) Percentage of employed & unemployed in rural and urban areas was as follows :

Rural	Employed	Male	42.81	Female	15.89	Total	29.21
	Unemployed	Male	3.11	Female	2.46	Total	2.78
Urban	Employed	Male	41.72	Female	14.62	Total	28.21
	Unemployed	Male	4.71	Female	3.56	Total	4.16

**(4) Age distribution of unemployed persons :**

(Percentage of unemployed persons)

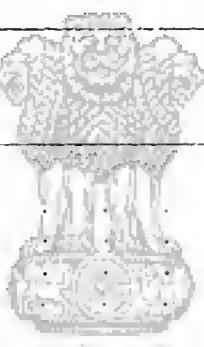
Age Group (Years)					Male	Female	Persons
15—19	.	.	.	.	35.17	34.03	34.67
20—24	.	.	.	.	31.13	30.08	30.66
25—29	.	.	.	.	13.00	11.19	12.20
30—34	.	.	.	.	6.22	7.09	6.60
35—39	.	.	.	.	4.29	6.43	5.24
40—59	.	.	.	.	10.06	11.10	10.53
Wrong entries	.	.	.	.	0.13	0.08	0.10

(5) Distribution of unemployed persons according to educational and technical qualifications :

(5.1) General Education	Percentage Distribution of Unemployed Persons		
	Male	Female	Persons
Illiterate . . . . .	10.30	27.30	17.88
Literate below middle . . . . .	43.17	32.89	38.61
Middle below matric . . . . .	19.51	13.93	17.03
Matric . . . . .	25.45	24.79	25.16
Graduate . . . . .	1.52	0.78	1.19
Post-Graduate . . . . .	0.05	0.23	0.13
TOTAL . . . . .	100.00	100.00	100.00

No. of Persons . . . . .	3,04,240	2,42,650	5,46,890
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(5.2) Technical Qualifications

Degree in :	No. of Persons		
	Male	Female	Persons
Agriculture . . . . .	320	..	320
Engineering . . . . .	190	..	190
Technology . . . . .	..	..	..
Medicine . . . . .	..	..	..
Diploma in :			
Engineering . . . . .	3,640	160	3,800
Technology . . . . .	890	320	1,210
Medicine . . . . .	..	..	..

(6) Intensity of unemployment was found to be most serious in Trivandrum district followed by the districts of Trichur, Alleppey & Quilon districts.

(7) 2.28 lakhs of unemployed persons had been without a job for more than one year.

(8) Percentage of unemployed registered with the Employment Exchanges :

Region	Male	Female	Persons
Rural . . . . .	18.69	11.60	15.62
Urban . . . . .	42.70	35.60	39.27
State . . . . .	23.37	17.08	20.58

(9) About 1.57 lakhs of unemployed men and 0.40 lakhs of unemployed women were willing to go outside the State for work.

(10) *Under-employment*.—12.38 lakh males (31.16%) of the total employed men and 4.74 lakh females (31.74%) of the employed women had reported themselves available for additional work. Out of these, 2.63 lakhs men and 0.71 lakh women workers had put in more than 42 hours of work during the week under reference.

Under-employment was most acute in Alleppey district followed by Quilon district.

(11) <i>Projection</i>		1971	1976
Population	.	21,70,12,000	24,42,19,000
<i>Labour force :</i>	.	69,10,000	77,58,000
(Below matric)	.	(60,90,000)	(65,70,000)
(Matric & above)	.	(8,20,000)	(11,88,000)

#### 7. Report of the Committee on Unemployment in Kerala, Part—I by State Planning Board, Kerala

In November, 1971 the Government of Kerala constituted a Committee on Unemployment with a view to studying the problem of unemployment in all its aspects and suggesting remedial measures capable of creating an immediate impact. The Committee after analysing the nature and magnitude of unemployment in Kerala submitted (in Part-I of the report) proposals which should be implemented immediately. The findings of the Committee so far as these relate to unemployment and under-employment were :

- (i) On the basis of the sample survey conducted in 1962 it was estimated that 7.60 lakhs of persons were unemployed in 1961. The 1961 Census indicated that proportion of workers to the total population came to 33.3% as against the All India average of 42.98%. The total non-working population was 112.7 lakhs.

In 1965 the Bureau of Economics and Statistics conducted a comprehensive survey of employment and unemployment. In the survey "a person who was directly or indirectly occupied in gainful work on atleast one day during the reference week, whatever normal hours of work put in might be, was treated as employed. A person in the age group of 15 to 59, without any gainful employment during the reference week and either seeking or available for work was treated as unemployed." As per the definition of the term 'unemployed' the survey revealed that the number of unemployed was 5.47 lakhs out of the estimated population of 187.8 lakhs and the labour force of 60.15 lakhs. Thus unemployed persons came to 9.7% of the total labour force. Among the unemployed, 2.5 lakhs persons were reported as seeking work and the rest, 3 lakhs not seeking but available for work.

Of the total 5.5 lakhs persons unemployed, 2.5 lakhs were females. While unemployed males formed only 1.1% of the male labour force, nearly 14% of the labour force was reported unemployed. Further, one lakh females unemployed i.e., 40% of them were actually seeking employment. As regards the

age composition of the unemployed it was observed that 65.3% of them belonged to the age group 15 to 24. This ratio was almost the same when the unemployed among the two sexes were considered separately. The survey also revealed that a large proportion of the unemployed i.e., 2.78 lakhs out of the 5.47 lakhs remained unemployed for more than one year. With regard to the educational attainment of the unemployed it was observed that out of the 5.47 lakhs unemployed more than 1/4th had education upto matriculation and above. Thus the bulk of the unemployed were either illiterates or those whose educational attainments were below the level of matriculation. Illiterates constituted 17.88% of the total, literates but with education below middle school level came to 38.61%; those with middle school and above but non-matriculates came to 17.03%; the above three groups, those with less than matriculation added upto 73.5%. On the other hand graduates and post-graduates together came to 1.32% of the total unemployed. The survey also showed that the incidence of the unemployment was greater in urban areas.

In the 1965 survey, 42 hours of work per week was considered a normal work week. On this basis 25% of the employed or 13.78 lakhs persons were estimated as under-employed. The proportion of underemployed was slightly higher among women viz. 27%.

No comprehensive survey on unemployment and under-employment was conducted after 1965. The only available source of data regarding unemployed persons was the number of applicants on the live register of the employment exchanges. On the basis of the proportion of unemployed registered with the exchanges, to the total unemployed as revealed by the 1965 survey, the committee estimated the number of unemployed and under-employed as on 31-3-1970. According to the Committee, the number of unemployed persons has risen to 9.06 lakhs forming 13% of the labour force and under-employed to 17.8 lakhs.

#### **8. Survey of ex-technical trainees registered with employment exchanges in Madhya Pradesh, (as on 30th June, 1965) issued by Directorate of Employment & Training, Madhya Pradesh (Jabalpur)**

**Year of study :**

1965.

**Objectives :**

- To find out (i) whether all the registered ex-technical trainees were really unemployed or they were employed but seeking better employment;
- (ii) how many of these were employed part-time or were self-employed;
- (iii) whether the unemployment revealed from the Exchange Statistics was due to friction in employment market and whether there were any categories which were not in demand at all; and
- (iv) to what extent the exchanges had been able to offer employment assistance to those registered currently.

**Coverage :**

All the passed out trainees from the Industrial Training Institutes under the Craftsmen Training Scheme of the Directorate General of Employment and Training who were on the live-register of the employment exchanges in Madhya Pradesh on 30th June, 1965 and the Ex-Technical who passed from the Industrial Training Institute located outside Madhya Pradesh but registered with the employment exchanges in Madhya Pradesh formed the frame and

populace of the survey. The total number of such registrants was 2288. Out of them only 1,439 i.e., 65.5 per cent of the populace could be covered.

**Broad findings :**

Out of 1439 Ex-Technical Trainees contacted, 843 or 58.6% were found to be unemployed, 401 or 27.9% fully employed, 70 or 4.8% part-time employees and 125 or 8.7% self-employed.

2. Out of 843 unemployed registrants, 570 or 67.6% had been without a job for less than 6 months, 167 or 19.8% for more than 6 months but less than one year; and 106 or 12.6% for over 12 months.

3. Out of 843 unemployed registrants, 91 or 10.8% wanted employment within the district; 341 or 40.5% within the State; and 411 or 48.7% anywhere in India.

4. Trade-wise figures of the total number of registrants contacted and the number found unemployed are given in the following table :—

Sl. No.	Name of the Trade	No. of Regis- trants Contacted	No. of Registrants Found to be Unemployed
1.	Blacksmithy . . . . .	65	45
2.	Carpentry . . . . .	87	41
3.	Draftsman (Civil) . . . . .	46	27
4.	Draughtsman (Mech.) . . . . .	121	70
5.	Electrician . . . . .	172	98
6.	Electroplator . . . . .	5	3
7.	Fitter . . . . .	123	66
8.	General Mechanic . . . . .	1	..
9.	Grinder . . . . .	2	2
10.	Instrument Mechanic . . . . .	2	1
11.	Machinist . . . . .	59	31
12.	Motor Mechanic . . . . .	111	77
13.	Moulder . . . . .	149	92
14.	Painter & Decorator . . . . .	7	1
15.	Pattern Maker . . . . .	85	47
16.	Pipe Fitter . . . . .	1	..
17.	Plumber . . . . .	1	..
18.	Printing Mechanic Operator . . . . .	1	1
19.	Refrigerator Mechanic . . . . .	1	..
20.	Sheet Metal Worker . . . . .	42	27
21.	Surveyor . . . . .	37	24
22.	Tailoring . . . . .	2	..
23.	Tracer . . . . .	1	1
24.	Turner . . . . .	151	91
25.	Welder . . . . .	67	41
26.	Wireman . . . . .	95	57
<b>TOTAL . . . . .</b>			<b>1,439</b>
			<b>843</b>

Relatively larger number of Ex-Technical trainees on the live register belonged to the trades of electrician, turner, moulder, draughtsman (Mechanical), fitter, motor mechanic, wirermen, pattern-maker and carpenter.

On the last day of June, 1965 the number of really unemployed applicants was estimated to be 97,962. 843 Ex-Technical Trained unemployed were only 0.86% of this number. This number was much less than the minimum that the developing economy of the State required.

#### **9. A survey of rural works programme—Madhya Pradesh by the Directorate of Employment and Training, Govt. of Madhya Pradesh**

##### **Year of study :**

1965-66.

##### **Place of survey :**

31 blocks in the Bhopal, Bilaspur, Gwalior, Indore, Jabalpur, Raipur Divisions of Madhya Pradesh.

##### **Objectives :**

- (i) To provide an economic back-ground of the Block and villages covered—to peep into trends of migration, wage rates and slack season; and
- (ii) to assess the achievement of Rural Works Programme.

##### **Design of survey :**

It was intended to cover all the 37 blocks and all the 424 villages covered under the Rural Works Programmes, but due to administrative difficulties, only 31 Blocks and out of them 152 villages were actually covered. Household survey was also undertaken in 5 villages of each of the blocks.

##### **Broad results :**

(i) *Occupational pattern.*—8,70,780 persons or 47.5% of the total population of the Block (18,34,290—persons according to 1961 census) constituted the working population. 7,37,996 persons (85% of the working population) depended on Agricultural activities located in villages and the rest 1,32,784 persons (15%) were engaged in non-agricultural activities. However, the proportion of agricultural population varied from Block to Block and ranged between 39.3% in Bagli (Devas District) to 94.6% in Chhagan Makhon (Khandwa District). Concentration of non-agricultural population was found only in a few Blocks e.g., Bagli, Bankhadi Shahpur, Mhow, etc. The working population belonged to the ages between 12 years and 60 years.

(ii) *Period of slack season.*—Rural economy is not able to absorb all the local manpower available and this causes unemployment and under-employment. People engaged in agriculture were forced to remain idle although they were willing to work. The slack season varied from Block to Block. However, in a large number of cases the period of slack season was reported to be January, April, May, June & December each year. February & March too were found to be slack periods in case of 15 and 16 blocks respectively. During the year 1965-66 the number of persons available for work during the slack season amounted to 5,45,598 including 18,561 skilled and 4,47,471 unskilled.

It was estimated that about 51,188 persons (4,000 of Bhopal Division, 1,800 of Bilaspur Division, 4,552 of Gwalior Division, 2,624 of Indore Division, 12,415 of Jabalpur Division, 657 of Raipur Division, and 25,110 of Rewa Division) migrate to neighbouring areas/districts for employment.

(iii) *The household survey*.—In the 31 Blocks surveyed 9,769 persons were found registered in March, 1966. The household survey conducted in 152 villages revealed that out of the total population of 73,961, 38,343 were males and 35,618 females. The population in the age group of 12-60 years, which is normally supposed to be working population, was 43,508 and out of this 703 persons were skilled workers. On account of inadequate employment opportunities 4,209 persons (2,445 male & 1,764 female) generally migrated to the neighbouring towns and cities. 27,756 persons (13,321 male 13,135 female) used to find out work in the villages at normal rates or preferred self-employment in the slack season.

(iv) *Manpower shortages*.—Out of 31 Blocks, only 7 Blocks, viz., Chanderi (Guna), Kundam (Jabalpur), Malkharoda (Bilaspur), Narasimhapur (Narasimhapur), Sirmur (Rewa), Shahnagar (Patna) and Taudukheda (Damoh) reported shortages of skilled manpower in executing the Rural Works Programme. The shortage was mainly in occupation of Mason, Blacksmith, Carpenter, Mechanic (automobile), Fitter and Plumber. Shortage of unskilled and semi-skilled workers was also reported in Amarwara (Chhindwara District), Ban-khedhi (Hoshangabad), Bharenjaygar (Rajgarh), Manasa (Mandsaur), Porca (Morena), Sanchi (Raisen) and Shahpur (Behal) Blocks.

#### **10. A re-survey on the changing pattern of employment and earnings by Gokhale Institute of Politics and Economics, Poona**

This study was sponsored by the Research Programme Committee of the Planning Commission. The field work was taken up in March, 1954 and completed in October, 1954. The report was submitted to the Research Programme Committee in November, 1955 and printed in April, 1956.

##### **Objectives :**

This was the second survey of its kind—the first one was conducted in 1937. The main objective of the present study was to assess the extent and form of unemployment and under-employment in all its aspects prevailing at that time.

For the purpose of this study, an unemployed person was defined as one who was actively looking for work and who had no gainful employment, part-time or full-time, temporarily or permanent, at the time of survey. Those who were looking for work for the first time were treated as new entrants. Similarly, casual workers i.e. those who generally had no fixed employer and were paid a time or piece rate when employed, and self-employed if those who worked on their own and did not hire anybody from outside the family were treated as partially unemployed i.e., "unemployed within employed".

##### **Main findings :**

The main findings of the survey so far as they related to the assessment of the unemployed and under employed were as follows :

- (i) Of the total earners coming in the sample only 9% of them were unemployed at the time of the survey. Of the total unemployed, 35.5%

were looking for employment for the first time *i.e.* freshers or new entrants; the rests were non-freshers. Among the freshers 85% were concentrated in the age group 16-25 years. Similarly among the non-freshers the largest concentration *i.e.* 22% was in the age group 21-25 years;

- (ii) among the unemployed 48% were registered with the employment exchanges 41% among non-freshers and 50% among freshers. Only 10% of the freshers were not prepared to go out of Poona for employment; a slightly larger number was ready to go anywhere. About 5% were ready to go out of Poona in urban areas. The rest, *i.e.* 72% did not given any reply to the question. Among the non-freshers 36% were not ready to go out of Poona even if they got employment in their old occupation; 48% were ready to go anywhere. 11% more were ready to go out of Poona to any urban areas. Only 4% did not express any opinion in the matter.
- (iii) as regards partial employment of casual workers it was observed that out of a total of 890 casual workers in the sample 73% were unskilled 18% skilled and about 5% highly unskilled. The degree of skillness was defined as the percentage of days on which the casual workers were employed to the total day's on which work was actively sought by them during the preceding month; and
- (iv) in the case of self-employed persons the percentage of those who secured employment (work), irrespective of whether it was adequate or not, on all the days they were open for business was 86% among unskilled, 70% among the skilled and 65% among the highly skilled workers. The percentage of those who got work on 50 to 90% of the days on which they accepted work was between 14-18 in all the three cases.

## 11. Works, wages and well-being in an Indian Metropolis—Economic Survey of Bombay City by D. T. Lakadawala, J. C. Sandesara, V. N. Kothari and

P. A. Nair

### Year of study :

August, 1954—March, 1957.

### Area :

Greater Bombay.

### Sampling design :

Each ward was taken up for survey. 3% of tenements were taken up for survey in each of the wards. Tenements were listed for the purpose. All the households residing in the tenements were interviewed & schedule was filled up. In all 13364 tenements were selected.

### Definitions :

*Household* : A household was defined as consisting of persons who not only share a common kitchen but all expenses also.

*Earners* : Earners as well as earning dependents having a source of earning were considered to be earners.

*Unemployed*: Person who was not in gainful employment and who was actively seeking a job and available for the same was treated as unemployed.

**Broad results :**

In the sample—tenements—13,369 families were surveyed. The domestic servants were, however, excluded from the households and their number was 4,212 (2,647 males & 1,365 females) of whom 10.6% were below 15 years of age, 2.6% over 54 years and 86.8% belonged to the ages between 15 and 54, majority being in the age groups 20-24 and 25-36. Out of the 13,369 households surveyed, 359 were of displaced persons, 2,247 of immigrants and 10,763 of the residents of the State.

The Distribution of population by economic status was as follows :

Sex	Displa- ced Persons	Immi- grants	Resi- dants	Total	Non-Earning Dependents			
					Displa- ced Persons	Immi- grants	Resi- dents	Total
Male	480	3,023	13,935	17,438	541	2,080	13,854	16,475
Female	41	198	1,624	1,863	976	3,825	22,591	27,392
<b>TOTAL</b>	<b>521</b>	<b>3,221</b>	<b>15,559</b>	<b>19,301</b>	<b>1,517</b>	<b>5,905</b>	<b>36,445</b>	<b>43,867</b>

Thus out of 2,038 the total No. of displaced persons, 25.6% were earners and 74.4% non-earning dependents; out of 9,126 immigrants 35.8% were earners and 64.2% were non-earning dependents; out of 63,168 residents, 29.9% were earners and 70.1% were non-earning dependents. Of the total population 30.6% were earners and 69.4% non-earning dependents.

The distribution of earners by Industry Group was as follows :

		Number	Percentage
1. Agriculture, Primary industry, mining & quarrying	.	269	1.4
2. Processing and manufacturing	•	7,858	40.7
3. Construction	•	359	1.9
4. Electricity, gas, water and sanitary services	•	329	2.7
5. Trade & Commerce	•	4,036	20.9
6. Transport, storage & communication	•	1,884	9.8
7. Health, education & public administration	•	1,709	8.9
8. Personal Services	•	1,162	6.0
9. Other services	•	598	3.1
10. Activities inadequately described	•	821	4.2
11. Unproductive sources of income	•	276	1.4
<b>TOTAL</b>	.	<b>19,301</b>	<b>100.0</b>

***Unemployed:***

There were 1,427 unemployed persons, 1,225 of whom were males and 202 were females. The unemployed formed 2.3% of the total number of persons covered. Among the males they formed 3.6% of the total while among females they amounted to 0.7 per cent.

The proportion of unemployed among displaced persons, immigrants and residents was 1.5, 1.8 and 2.4% respectively.

Of the unemployed persons 61.4 per cent were previously employed and only 38.6 per cent were freshers. Their distribution by age group was as follows :

Age Group	Males	Females	Total	Percentage		
				Males	Females	Total
Below 15	14	4	18	1·1	2·0	1·3
15-24	691	106	797	5·64	52·5	55·9
25-34	257	52	309	21·00	25·7	21·7
35-44	107	25	132	8·7	12·4	9·8
45-54	103	11	114	8·4	5·4	8·0
55-64	50	2	52	4·1	1·0	3·6
65 & above	3	2	5	0·2	1·0	0·4
<b>TOTAL</b>	<b>1,225</b>	<b>202</b>	<b>1,427</b>			

The distribution of unemployed according to education level was as follows :

Educational Level	Percentage of Unemployed			Seeking for the			Total		
	Previously Employed		First Time						
	Male	Female	Male	Female	Total				
Illiterate	27·9	48·5	21·5	6·7	36·6	12·2	13·8	42·6	17·9
Literate	15·4	6·9	14·4	10·9	5·9	10·0	13·7	6·4	12·7
Primary school	24·6	5·0	22·4	22·9	5·9	19·8	24·0	5·4	21·4
Middle school	121·4	15·8	20·8	27·1	10·9	24·1	23·5	13·4	22·1
Secondary school	10·7	6·9	10·3	10·0	6·9	9·4	10·4	5·9	10·0
Matriculate	6·7	9·9	7·1	16·4	26·7	18·3	10·3	18·3	11·4
Under-graduate	0·8	..	0·7	1·1	2·0	1·5	0·9	1·0	0·9
Other diplomas	0·3	1·0	0·3	0·2	2·0	0·5	0·2	1·5	0·4
Technical diploma	0·4	..	0·3	0·4	..	2·4	0·4	..	0·4
Graduates	1·4	5·9	1·9	3·6	3·0	3·4	2·2	4·5	2·5
No or inadequate information	0·4	..	0·3	0·7	..	0·5	0·5	..	0·4
<b>TOTAL PERCENTAGE</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>
<b>TOTAL PERSONS</b>	<b>775</b>	<b>101</b>	<b>876</b>	<b>450</b>	<b>101</b>	<b>551</b>	<b>1,225</b>	<b>202</b>	<b>1,427</b>

**12. An enquiry into the problems of low income farmers in Kodinar Taluka, 1958 by Dr. C. H. Shah, Indian Society of Agricultural Economics**

**Objectives :**

The study was undertaken in order to enquire into the working and economic conditions of small farmers in Kodinar Taluka in Maharashtra State in 1952-53 as an extension of the progress of the cooperative movement in the Taluka undertaken by the Society in 1950-52.

**Methods :**

In order to assess the amount of unemployment under-employment in the Taluka, an attempt was made to measure the excess labour supply on and off the farms. A broad indication of the concentration of excess supply of family labour under different size group of farms was obtained by deducting off-farm employment of working members of farm families in different groups from the total period available for work for respective groups. When related to the extent of land cultivated and the extent of irrigation (as an index of the intensity of land use) by different groups of farmers, it was expected to provide a measure for the over-supply of labour with the small farmer.

**Main findings :**

The percentage of off-farm employment for the year under survey, 1952-53 among the different groups of farmers was as follows :

*Percentage of off-farm employment*

Group	Males	Females	Children (5-14)
Big	16	8	0.9
Medium	33	15	6.0
Small	64	34	11.0

Off-farm employment was found to be most extensive among small farmers. Nearly two-thirds of males and one-third of females worked for off-farm employment from among the working members of the small farmers' families. Moreover, a proportionately larger number of males and females from among small farmers' families were employed for a longer period; over 51 per cent of males in off-farm employment from among small farmers' families were employed for more than three months against 35 per cent from medium and 30 per cent from big cultivators' families respectively.

Nearly 63 per cent of big farmers and about 40 per cent of medium farmers experienced labour shortage. From among small farmers—the group which was the source of substantial supply of agricultural labour—more than 50 per cent did not hire labour. From among those hiring labour in this group, only one-third experienced labour shortage.

The broad picture of the relative supplies of unused labour with different farming groups was obtained by deducting off-farm employment of working members of farm families in different groups from their total working period

and relating the residual labour and the land available for cultivation. The following is the relevant analysis :

Group	Labour Available for Work on own Farm (man-mon- ths percentage of)	Average Size of Holding (acres)	Extent of Area Under Irrigation (percentage of Total Cultivated Area)
Big . . . . .	2·24	21·1	14·8
Medium . . . . .	3·67	10·2	20·7
Small . . . . .	6·27	4·5	32·1

To make allowance for intensity of cultivation, data regarding irrigation along with the labour supply available for work on own farm were also collected. The labour supply was calculated in terms of broad units of man-months. The table showed further that the extent of irrigation on small farms, was nearly double that for big cultivators. Even after taking into consideration the larger amount of labour required for operation of irrigated lands, the excess of family labour with the small farms remained substantially heavy.

### 13. Sample survey of employment in rural handicrafts, 1958-59—Bureau of Economics and Statistics, Government of Maharashtra, Bombay

The Bureau of Economics and Statistics, Government of Maharashtra, undertook a sample survey in Community Development areas to find out the extent of employment generated by various cottage industries and rural handicrafts.

#### Period of survey :

The field work for the survey was undertaken between December, 1958 and November, 1959.

#### Objectives :

The objectives of the Study were

- “(i) to find out the proportion of rural population engaged in the cottage industries;
- “(ii) to find out the pattern of various cottage industries;
- “(iii) to arrive at the full-time and part-time employment in the industries and
- “(iv) the contribution of the industries to the State income”.

#### Scope :

The scope of the survey was restricted to the C. D. Blocks which were inaugurated prior to April 1, 1958; 87 Blocks were selected in the State.

#### Concepts and methods :

*Household* : A household was defined as an unit of the person taking their meals from a common kitchen. All households engaged in industrial activities

during the reference period with the help of owned or hired tools were the ultimate sampling unit for the sample enquiry. The survey was conducted by a stratified two-stage sampling method.

*Employed* : According to the survey, any member engaged for at least some part of any day during the reference month in the industry (cottage or handicrafts) was considered to be employed.

#### Findings :

The survey revealed that labour in the industries usually consisted of male household members above 15 years in age. With an inferred average size of household of 5 members, it was estimated that on an average, the number of members per household engaged in the industry was not likely to exceed two. No rigid definition about the number of hours which would constitute full-time or part-time work was laid down for the purpose of the survey. It was left to the individual artisan to fix the number of hours which would comprise full-time/part-time work. About 75 per cent of those engaged in the industries regarded 7 hours or more as full-time working day. Nearly 75 per cent of the workers surveyed worked for more than 7 hours per day.

The intensity of employment was expressed in terms of equivalent full-time days in the equation as follows :

$$\text{Equivalent full-time days} = \frac{X \cdot Y + X' \cdot Y'}{Y}$$

Where X = full-time work

Y = hours constituting a full-time day

X' = Part-time work

Y' = Hours constituting part-time day

According to this equation, the average intensity of employment in all industries together was equivalent to 17 full-time days in a month. (the average intensity was relatively lower in the pottery industry as compared to the other industries, due mainly to the four months of the monsoon in Maharashtra when the drying of clay products was not possible). About 28 per cent of household workers in the State were engaged in the industry for less than ten full-time days in a month, while 38 per cent were engaged for more than 20 full-time days.

#### 14. Employment generation under community development and rural works projects during 1963-64—Directorate of Employment, Government of Maharashtra, Bombay

##### Objectives :

This survey was a follow-up of studies conducted by the Directorate General of Employment and Training in 1962 and 1963 to examine the employment aspects of the rural works programmes and community development programmes in selected blocks in the country.

##### Period & coverage, etc.:

For the current study, conducted in 1963-64, 11 blocks were selected, of which three blocks had been surveyed by the DGE & T earlier. A proforma was

circulated to the selected blocks for collecting information on the economic background and rural works programme. The information was collected by the staff of the employment exchanges and the E.I.A.B.'s and was obtained from various sources including the Census authorities, Block Development Officers and other village authorities. Household surveys were also conducted in selected villages in each block to gather requisite material in regard to the economic background, number of persons available for work etc.

#### Main findings :

The survey revealed that the period of unemployment in the rural areas—which coincided with the slack season in agriculture—depended to a great extent upon the cropping pattern, the climatic conditions and the irrigated areas. In the selected blocks, the slack season ranged from three months in one block to eight months in another. The continuous period of unemployment in the selected blocks facilitated mobilisation of labour for employment under rural works programme.

An attempt was made in the course of the survey to find out the number of persons available for work during the slack season in selected blocks. It was observed that on an average 41.3 per cent of the total rural work force was available for work during the slack season. This percentage varied from 18 per cent in one block to 52 per cent in another. The number of persons available for work totalled 42.93 lakh persons of which 42.89 lakh persons were unskilled and 0.04 lakh persons were skilled.

As this study was mainly to assess the extent of employment generated by the rural works programme, an attempt was made to assume the amount of employment generated by the rural works programme. These programmes generated in all about 7.87 lakh man-days of work during 1963-64. Road construction was the most popular scheme and accounted for about 46.7 per cent of the total man-days of work generated by the rural works programme. This was followed by soil conservation, contour and field bunding (20.2 per cent), land reclamation (13.4 per cent) and minor irrigation programmes (11.1 per cent). Programmes such as flood protection, horticulture, school buildings, etc., generated barely 8.6 per cent of the total employment in man-days.

An attempt was made to compare the quantum of employment generated by the rural works programme between 1961-62 and 1963-64; it was observed that in three blocks out of five for which comparative information was available, the employment generated during 1963-64 was in excess of what took place in 1961-62. Similarly in 8 blocks out of 11, the employment generated during 1963-64, was in excess of that in 1962-63. While the rural works programmes have generated additional employment of 7.87 lakh man-days in the 11 selected blocks during 1963-64, the Community Development Programme had generated 15.07 lakh additional man-days of work. The expenditure on wages under the Rural Works Programme was Rs. 12.10 lakhs while that under the Community Development Programme was Rs. 23.72 lakhs in 1963-64.

The survey also attempted to estimate the migration trend in search of work from the villages that were covered by the Rural Works Programme in the 11 blocks. It revealed that nearly 73,000 persons migrated from 8 blocks surveyed; the remaining three blocks did not report any migration. The maximum migration of person in search of work was reported from the Man block in Satara District from where nearly 35.6 thousand persons move in search of work to Sakharwadi, Phaltin Rathore, Koregaon and Rahimatpur. In a number of other blocks, the movement of workers took place from one village to another within the block itself wherever the Rural Works Programme was being undertaken.

Thus in Ambad block in Ahmednagar district about 16,000 workers moved within the block for undertaking soil conservation work during that year.

**15. Employment generation under community development and rural works projects during 1965-66—Directorate of Employment, Government of Maharashtra, Bombay**

As in the previous years, a Study was undertaken by the Directorate of Employment, Government of Maharashtra to examine the employment aspects of the rural works programme and community development programme in selected blocks. While 11 blocks were surveyed in 1963-64, 25 blocks were surveyed in 1964-65. The total number of villages surveyed in the blocks was 937. As in the previous years, the survey revealed that the period of unemployment, that is, the slack season ranged from three months in one block to eight months in another. This facilitated mobilisation of labour for employment under the rural works programme schemes. As in the preceding Study, the percentage of employment generated by road construction was the highest (51.6) followed by soil conservation, bunding and others. The survey revealed that the total of 32.26 lakh man-days of employment was created during 1964-65 in the 937 villages in the 25 blocks. The expenditure incurred in generating this employment came to Rs. 107.39 crores. Of this, an expenditure of Rs. 81.50 lakhs and employment of 20.48 lakh man-days were in terms of normal developmental activities and Rs. 25.89 lakhs and employment of 11.73 lakh man-days under the Rural Works Programme. The workers benefited from these programmes totalled 15 thousand skilled and 4.16 lakh unskilled.

As in the previous year, migration continued to be the largest in the Man block of Satara where persons moved to the different towns mentioned earlier to work in sugar factories, the next highest was in the Khed block in Poona district where about 13 thousand persons moved out to nearby villages in search of work.

**16. Employment generation under community development and rural works projects during 1965-66—Directorate of Employment, Government of Maharashtra, Bombay**

For 1965-66 also, 25 blocks were selected for the purposes of study. As in the previous years, it was found that the total employment generated during the period April, 1965 to March, 1966 worked out to 97.32 lakh man-days. The employment generated increased by 60.1 per cent between April, 1963 and March, 1966. It was found that in almost all the blocks surveyed the number of persons available for work during the slack season progressively declined between 1963-64 and 1965-66. The number of persons available and willing to work during the slack period in the 25 blocks decreased by 20.8 per cent as compared to the previous year. In the 11 blocks surveyed continuously between April, 1963 and March, 1966, the decline was 59.4 per cent and in the 3 identical blocks continuously surveyed since April, 1962, the decline was 40.6 per cent. Similarly, the number of persons available for work to total working population also declined by 7.4 per cent, 18.1 per cent and 24.4 per cent respectively in the 25, 11 and 3 identical blocks. Migration from the blocks, however, increased during this period.

**17. Employment status of engineering graduates and diploma holders on the live register of the employment exchanges in Maharashtra State**

**Objective :**

The objective of the study was to ascertain the proportion of employed engineers on the live registers of the employment exchanges in the State.

### Coverage :

The study was restricted to graduate and diploma holders in all engineering faculties who remained on the live register of the employment exchanges in the State as on 30th November, 1965. The required information was collected through mail questionnaire method. The information collected broadly related to :

- (i) Pre-employment details and information relating to identifications;
- (ii) employment details ;
- (iii) employment status ;
- (iv) unemployment details; and
- (v) limitations of mobility and job preferences of employment seekers.

In all 1080 engineering personnels who were on the live register of the employment exchanges on 30th November, 1965 were addressed and 571 i.e., 52.9% responded.

### Main findings :

(i) Out of the 571 applicants who responded, 213 i.e., 37.3% were actually in employment. The break-up was as under :

Degree/Diploma	No. of Applicants Found Gainfully Employed	Unemployed	Total	Percentage of Employed to the Total No.
Degree . . . .	65	61	126	51.6
Diploma . . . .	148	297	445	33.3
<b>TOTAL</b> . .	<b>213</b>	<b>358</b>	<b>571</b>	<b>37.3</b>

Of the 213 engineering personnels gainfully employed as many as 195 found employment directly and 18 through employment exchanges.

(ii) Time lag between completing education and obtaining first employment which is normally called "waiting period" is an important aspect of the problem of employment. Information received in this regard showed that 80.4% were able to secure job within 6 months from passing the examination. The percentage of those who secured job within a period of 6 months to one year was 16.2. The total personnels who were having a lag of one to two years and two to five years were 3 and 0.5 per cent respectively. As regards the unemployed engineering personnels on the live register of the employment exchanges, it was observed that 48.2% were in the unemployed period of less than 6 months, 41.2% in the period of 6 months to one year, 9% in the period of one year to two years and 1.6% for a period of more than two years. Faculty-wise analysis showed that the Mechanical and Electrical engineering personnels remained unemployed for a longer period as compared to other faculties.

(iii) The place of work and the residence of the applicants are important factors in regard to placement of the applicants. The data so collected revealed that 73.6% of the engineering personnels were prepared to move anywhere in India, 18.4% were ready to move only in the State, about 3.6% wanted jobs in their district of residence and 4.4% did not want to leave their Headquarters town. These movements were, however, connected to the 46.7% of the graduates expecting more than Rs. 400 and 63.3% of the diploma holders expecting about Rs. 300. The information collected with regard to the preference for jobs, it was

observed that 73% of the degree holders preferred jobs in construction, production and manufacturing line, 8.2% teaching line and the remaining preferred administrative jobs. As regards diploma holders 81.2% preferred jobs in manufacturing, construction or production line, 3.4% wanted teaching line and 3% desired administrative jobs while 12.4% had no particular preferences.

**18. Some Features of Economic Status of Job Seekers at Employment Exchange by Director of Employment, Government of Maharashtra, Bombay, 1965**

**Year : 1965.**

**Coverage :** Two employment exchanges at Bombay.

**Objective :**

To enquire about the employment status of the candidates registered in the Employment exchanges at the time of their registration and at any time during the preceding 12 months.

**Sampling design :**

During the four months ending 31st December, 1965 all of the fresh entrants were subjected to this enquiry. Besides, those called for submission were also interviewed for replies to the questionnaire.

In all 32,325 fresh registrants and 14,721 candidates called for submission had been interviewed.

**Broad Results :**

Analysis of employment status of the registrants by type of applicants was as follows :

Type of Applicants	Total Number Registered/ Submitted (= 100%)	Percentage of Registered/ Employed	Percentage Reporting to be Employed	Percentage of Unemployed	Total Employed during past 12 Months
<b>(A) Applicants registered during Sept., 1965 to Dec., 1965.</b>					
1. Clerical & allied	9,860	4.0	13.0	83.0	100
2. Skilled	4,590	7.3	69.6	23.1	100
3. Unskilled	17,875	10.1	31.4	58.5	100
<b>TOTAL</b>	<b>32,325</b>	<b>7.9</b>	<b>31.4</b>	<b>60.6</b>	<b>100</b>
<b>(B) Registrants called for submission during Sept. to Nov., 1965</b>					
1. Clerical & allied	4,012	8.1	13.7	78.2	100
2. Skilled	3,473	25.4	42.2	32.4	100
3. Unskilled	7,236	7.5	10.5	82.0	100
<b>TOTAL</b>	<b>14,721</b>	<b>11.8</b>	<b>18.7</b>	<b>69.5</b>	<b>100</b>

Thus out of 47,646 registrants (32,325 interviewed at the time of registration and 14,721 at the time of submission,) 4,801 or (9.1%) reported to be in employment and yet seeking work. As many as 12,955 or 27.5% had reported some employment during the preceding twelve months. The remaining 29,790 or 63.4% were unemployed.

**19. Economic and employment status of job seekers at employment exchange—some features of by Directorate of Employment, Government of Maharashtra, Bombay**

Year : 1965..

**Area of the study :**

Maharashtra State (Excluding the two Exchanges in Greater Bombay.)

**Objectives :**

- (i) To ascertain from those found unemployed job preference, mobility, intention to continue studies and means of support while unemployed;
- (ii) to find out from those found to be gainfully engaged details such as whether they were seasonally employed, working on daily wages, self employed, etc.

**Sampling design :**

From the candidates on the live register as on 30-6-1964, belonging to 75 Talukas, 12.7% of the candidates were selected. The selected candidates represented skilled, semi-skilled and other candidates who had registered themselves for clerical & allied jobs. In all out of 24,941 candidates 3,157 were selected. The response was as high as 80.2% or 2,533. Besides the candidates on live register, 2,410 candidates were selected out of 2.28 lakhs candidates whose registration had lapsed. 1,013 only could be contacted.

**Main findings :**

932 out of 2,533 (36.8%) of the registrants were found gainfully employed as mentioned below :

Category	Self-employed	Seasonally Employed or on Daily Wages	Regularly Employed	Total	Percentage of the Total Number of Registrants in Different Categories
1. Clerical . . .	98	63	317	478	27.6
2. Skilled . . .	47	73	103	223	54
3. Semi-skilled . . .	41	75	115	231	58.2

Out of 1,013 candidates contacted out of the 2.28 lakhs candidates whose registration had elapsed 326 (32%) were found employer and 687(68%) had not sought renewal of registration due to various reasons.

Of the 1,601 registrants still *unemployed* 1,088 were matriculates and above, 82, graduates and 431 below matriculation. 227 (17%) were continuing further studies. 113 had been unemployed for more than 2 years, 537 for more than 1 year but less than 2 years, and 951 for less than a year. Their distribution as per age group was as follows :

Below 21 years . . . . .	703
21 to 25 years . . . . .	582
25 to 35 years . . . . .	263
35 years and above . . . . .	53
<hr/>	
	1,601

Distribution of unemployed registrants by place preference was as follows :

Wanted employment within district . . . . .	923
Outside district but within division . . . . .	224
Within Maharashtra State . . . . .	418
Any where in India . . . . .	36
<hr/>	
	1,601

Although the unemployed candidates had been registered under the categories clerical, semi-skilled and skilled, their job preferences were as follows :

Clerical jobs . . . . .	900
Teaching . . . . .	173
Supervisory jobs . . . . .	34
Some technical job . . . . .	193
Skilled employment . . . . .	278
Semi-skilled employment . . . . .	19
Not recorded	4
<hr/>	
	1,601

Thus as many as 691% of the unemployed registrants preferred "white-collar" jobs.

Of the 1,601 unemployed registrants, 229 possessed land, 100 had some household industry, and 68 had some family business. The rest depended on their parents or other family members.

**20. The Poona Labour Market (A Pilot Study)—Directorate of Employment, Government of Maharashtra, Bombay, 1965**

**Coverage :**

The Study was confined to 75 square miles of the Poona industrial area. For the purposes of the Study, a sample of 23 establishments was selected—20 in the private sector and 3 in the public sector—employing more than 200 persons. The sample establishments were all from the manufacturing activities. The Study was conducted through the circulation of schedules to the employers of the selected establishments. The schedules were forwarded in October, 1964 and the replies were received back in December, 1964. The data was also collected from Employment Exchanges in Poona. The Study pertains to the period 1961 to 1964.

**Main findings :**

The Study revealed that 53,451 persons sought work through the Sub-Regional Employment Exchange, Poona during 1964; the number of vacancies notified were 16,717. The vacancies notified were more than the applicants registered in the case of Professional and Technical jobs, Administrative Executives, Farmers, Miners, Craftsmen, Services and Sportsmen, while the demand was less than the supply in the case of unskilled workers, unskilled office workers, transport and communication workers, clerks and salesmen.

The registration and placement of different ranks of applicants with the employment exchanges was as follows :

Qualifications	1961		1962		1963		1964	
	Regis- tered	Placed	Regis- tered	Placed	Regis- tered	Placed	Regis- tered	Placed
S.S.C.	7,861	1,438	7,974	1,078	11,466	1,615	10,111	896
Graduates (B.A., B.Sc., B.Com.)	1,003	195	1,658	235	1,469	949	1,793	515
Engineering Graduates	232	36	267	54	336	187	314	73
Engineering Diploma Holders	776	39	687	30	601	89	460	85
Craftsmen	508	57	648	62	752	126	815	200

In order to ascertain the future requirements of the industries, the selected establishments were asked to furnish their needs of manpower for 1965 and 1966. 14 establishments out of 23 gave some estimates. It was estimated that these establishments would require 3,478 additional persons, so that the employment strength would rise from 13,396 in 1964 to 16,874 by 1966 (*i.e.*, by 25%). Manpower shortages were experienced by the establishments during January—June, 1964 for skilled craftsmen like millers, tool cutters, grinders, tool room fitters, capstan and turret lathe operators, internal grinding machine operators, capstan setters etc.

**21. Industrial Training Institutes and Employment in Maharashtra—Directorate of Employment, Government of Maharashtra, Bombay, November, 1965**

**Objective :**

The Study was undertaken to probe into the placement of skilled and trained craftsmen in various engineering trades and to study their employment status in relation to their experience, year of passing, their recruitment pattern and wage structure. The frame of the enquiry was limited to establishments employing 500 or more workers from both private and public sectors.

**Coverage :**

For the purpose of this study as many as 99 establishments in the public and 272 in the private sector with an employment of 500 or more were addressed. Replies were received from 93 of the public and 266 of the private sector establishments.

**Main findings :**

The study revealed that 14,500 personnel have passed out of different establishments between 1959 and 1965. Towards the close of 1965, 2,151 I.T.I. trained personnel were on the live register of the employment exchanges in the State, as against 2,260 who had been identified as employed in 40 industrial establishments in the public and 81 in the private sector with a total labour force of 2.59 lakhs including about 26,000 craftsmen.

The study also sought to find out the location of the institutes from which the trainees had passed out and the sources through which they found employment. Out of 2,033 trained persons from whom information was available, 183 had been trained in institutes outside Maharashtra State. As many as 1,324 obtained employment by their own efforts, 429 through employment exchanges and 239 with the help of the concerned training institutes. The bulk of the personnel found employment in the Bombay-Thana industrial area and in the Poona industrial complex. About 250 trainees had found employment in Satara and Nagpur. Most of the trainees earned at an average between Rs. 100 and Rs. 150 per month. A few (35) earned around Rs. 300 per month.

**22. Report on rural employment in Maharashtra—Study Group, Maharashtra Economic Development Council, 1966**

**Objective and coverage :**

The Study Group constituted by the Maharashtra Economic Development Council submitted its report on "Rural Employment in Maharashtra" in 1966. The Group considered mainly the unemployment of a low-term nature in the rural villages, i.e., villages with population of less than 5,000 in the State, and gave their recommendations for alleviating the unemployment problem in the rural areas.

**Data collection :**

Initially, the Group had prepared a Questionnaire and requested District Collectors, District Cooperative Banks, Zilla Parishads and Panchayat Samities to send their replies. As the response was very unsatisfactory, the Group made use of the data available in the Census of India, 1961 and the Hand Book of Basic Statistics of Maharashtra State, 1963.

**Concepts and definitions :**

The study is based on the concepts and definitions of unemployment as enunciated by (a) the Eighth International Conference of Labour Statisticians

(ILO), 1955, (b) the National Sample Surveys and (c) the State Plan documents.

#### Main findings :

(i) As against the backlog of 4.46 lakhs of unemployed persons at the beginning of the Second Plan in the State and the addition of 10.55 lakhs to the labour force during the period, the new employment created during the Plan was only of the order of 7.17 lakhs. The Third Plan started with a backlog of 7.84 lakhs and it is estimated that in the Plan period increase in the labour force would be about 16.5 lakhs. Thus the backlog of employment which was about 4.46 lakhs at the beginning of the Second Plan increased to 7.84 lakhs by the end of the Plan and is estimated to have increased appreciably further by now.

(ii) There is the usual under-employment of substantial size in the agricultural rural population which constitutes 72% of the State population.

#### 23. Socio-economic survey of Visapur village in Tasgaon Tehsil, District Sangli, Maharashtra—Commissioner of Labour and Director of Employment, Government of Maharashtra

The socio-economic survey in the village of Visapur, in the Tasgaon Tehsil of Sangli District was carried out by a team of officers from the Directorate of Employment in collaboration with the office of the Commissioner of Labour, Government of Maharashtra, between August 3, 1968 and August 15, 1968.

#### Objective :

The survey was undertaken to assess the impact of the development plans during the three Five Year Plan periods in a depressed village in proximity to the district headquarters.

#### Coverage :

A complete enumeration of all the households in the village was undertaken and information was collected on the basis of actual enquiry, discussions and through Questionnaires and Schedules drawn up for the purpose. Data were collected on household particulars, demographic particulars, family members' enterprise, indebtedness, family budget and activities during the off-season. Information relating to the persons unemployed was collected from household survey Schedules. Persons in the labour force seeking gainful employment on the day of the survey were taken to be unemployed.

#### Main findings :

According to the survey, only 47 persons or less than 3% of the workers were openly unemployed (16.1% of these were educated unemployed). Of the total workers, only 10% had regular work throughout the year, 10% were casual workers and the remaining 80% were more or less fully employed during the season (141 to 180 days), 33% worked for less than 100 days (30-100 days) while the balance worked between 100 and 140 days in a year. Two-thirds of the seasonally employed workers reported that they sought work in the off-season. There was, however, no way of judging whether they were willing to work at the prevailing wage rate. A third of the off season employment seekers were willing to work for a wage rate of Rs. 2 to Rs. 3 per day which was higher than the going wage rate—the rest wanted still higher wages.

**24. A study on the pattern of utilisation of educated persons in Orissa—Planning and Co-ordination Department—of Government of Orissa**

This study was undertaken by the Planning and Coordination (Evaluation) Department of the Government of Orissa at the instance of the Planning Commission in 1966.

**Objective and coverage :**

The objective of the study was to find out the utilisation pattern of educated persons who have come out successfully from the educational institutions in the State. The survey covered the candidates coming out successfully from the various institutions in the year 1963 only.

**Methods :**

The required information was collected through mailed questionnaire method. The students coming out successfully in the year 1963 were stratified according to the faculties and from each faculty a proportionate sample was selected. Of the 1983 successful candidates, 650 were addressed. Only 250 i.e. 38.5% responded.

**Main findings :**

Of the 250 respondents, 210 were employed, 17 were unemployed and 23 were engaged in further studies. The distribution of 250 respondents by faculty group was :

Faculty Group	Employed	Unemployed	Studying	Total
Graduate	145	13	21	179
Post-graduate	31	2	1	34
Diploma holders in engineering	34	2	1	37
<b>TOTAL</b>	<b>210</b>	<b>17</b>	<b>23</b>	<b>250</b>

The distribution of respondents according to the current activity status was :

Current Activity Status	Graduates	Post- Graduates	Diploma Holders in Engineering	Total
Further studies	21	1	1	23
Self-employed	4	..	..	4
Paid employed	139	31	34	204
Unemployed but available for work	13	2	2	17
Paid apprentices	1	..	..	1
Not specified	1	..	..	1
<b>TOTAL</b>	<b>179</b>	<b>34</b>	<b>37</b>	<b>250</b>

Of the 17 unemployed, 13 (76.5%) were registered with the employment exchanges. Of the 13 registered with the employment exchanges 10 were graduates, one post-graduate and two diploma holders. Of the 17 unemployed, 3 were willing to accept the job with the minimum salary of Rs. 150-199, 7 between Rs. 200-299, 5 between Rs. 300-499 and one Rs. 500 and above. One did not indicate any salary for a job.

## **25. Employment in the industrial estates of Ludhiana by Directorate of Employment, Punjab, Chandigarh**

### **Objective and coverage :**

The objective of the study was to evaluate the employment norms in terms of correlation between the capital invested in various types of industries and the corresponding employment generated by them. The study was restricted to the working industrial enterprises of the private sector located in the industrial estate, Ludhiana on 31st March, 1964. The required data were collected by mailing a questionnaire to the then 194 working industrial units in the private sector.

### **Main findings :**

The study revealed that a majority of the industrial units (66%) employed less than 10 workers. The capital invested by the various units also varied considerably from Rs. 5,000 to Rs. 2 lakhs but a substantial number of units (45%) had invested capital between Rs. 5,001 to Rs. 20,000. Practically all the industrial units were engaged in manufacturing activities and worked in single shift (98%). Although manufacturing industries were greatly diversified, a particular feature was the concentration of industries engaged in manufacturing bicycle, bicycle parts and auto parts, which constituted 42.8% of the total industrial units, 41.2% of the total employment, and 35.0% of the total capital invested in the estate.

The study further revealed that 60.3% of the industrial units were utilising their installed capacity to the fullest extent. The factors responsible for non-utilisation of the installed capacity were shortage of raw material, inadequate credit facilities, shortage of power and shortage of highly skilled trained personnel such as die-maker, turner, metal polisher, fitter, machinist, welder, miller, shaper, mechanic, etc. In case these difficulties are overcome and the installed industrial capacity is thereby fully utilised, additional employment openings can be found for about another 433 persons.

The average investment was approximately Rs. 4,000 per person employed. However, this magnitude showed marked variation in the different industries. The highest investment per person engaged was Rs. 11.1 thousand in the manufacturing activity of wheel barrow, trailers, etc. Next, came industries manufacturing tool kits with the magnitude of Rs. 10.2 thousand per person employed. The lowest magnitude was Rs. 1.4 thousand per person employed and this was in respect of industries engaged in electro-plating. On the basis of the study of the investment-employment ratio in different types of enterprises of industrial estates, it was observed that the small industries sector was comparatively more labour-intensive.

## **26. Part-time employment survey by the State Directorate of Employment, Punjab**

A survey was conducted by the Deputy Regional Employment Officer, Chandigarh and the Assistant Employment Officer (Employment Market Information), Jullundur under instructions from the State Director of Employment,

Punjab during the period June-August, 1966 under the broad heading "Part-time Employment Survey". The fields that were covered and the important points are given below :

#### Main findings :

(i) *Industry* : Firstly, extra help is mostly needed in the skilled categories and there are practically no skilled workers available for part-time employment. Secondly, labour laws are too complex to encourage any innovations by the industrialists. Thirdly, unskilled labour is plenty and cheap and lastly, most of the workers work in 8 hour shifts and the part-time work does not fit in any-where in the present scheme of things.

(ii) *Hotels, cafeteria and restaurants* : It was found that only one hotel, out of at least a dozen sleek modern hotels, employed part-time workers. It appeared that with persistent contacts there might be some scope for part-time work in hotels and restaurants.

(iii) *Retail trade* : Most of the people under this head were allergic to this idea of employing part-time workers. However, some people were found encouraged and were ready to employ provided they have the guarantee of good conduct from the respective college or university.

(iv) There was no scope in the Government stores for part-time workers. There is, however, a proposal to employ one part-time worker each at four of the Punjab Government Emporia at Rs. 100/- p.m. fixed. One of the emporia is at Chandigarh.

(v) *Chandigarh milk supply* : The progress made in this field has been encouraging in the sense that it could provide part-time employment to 43 workers last year bringing the figure to 90 at present. The remuneration for booth attendants and booth managers had been fixed at Rs. 40/- p.m. and Rs. 50 p.m. respectively.

#### Conclusion :

To sum up, there are hardly any possibilities of developing part-time employment opportunities in Jullundur or at Chandigarh but are likely to exist in large industrial cities. However, it was felt that educated persons and teachers could take up tuition work in private houses on a part time basis and part-time jobs could be found for typists and steno-typists if proper liaison is kept with principals of various institutions dealing with the above subjects.

#### 27. Co-ordination between training and employment of skilled craftsmen in Punjab, 1970-71—Economic Adviser, Government of Punjab, Chandigarh

##### Objective :

This pilot study was undertaken in Ludhiana district, Punjab during 1967 to 1969 to find out the reasons of growing unemployment among skilled craftsmen and to take up remedial measures.

##### Coverage :

The employment and unemployment situation among the trained craftsmen in Ludhiana district as reflected by employment exchange statistics was studied.

##### Concepts :

There were two types of skilled craftsmen that appeared on the Live Register of Employment Exchanges. The first type was that of 'skilled' persons. A skilled person was defined as a craftsman who had (a) an experience of six months and above in the trade, or (b) undergone institutional training but

not received the certificate. The second type was the 'ex-trainee' who was defined as craftsman who after successfully completing the institutional training had obtained a certificate after undergoing in plant apprenticeship training.

#### Main findings :

(i) The information collected from the ex-trainees revealed that out of the total 133 Craftsmen who supplied the information 60 or 45.1 per cent were employed at the time of the enquiry and 62 of them, i.e. 46.6 per cent had reported themselves as unemployed. In addition to the above 11 (8.3 per cent) ex-trainees had shown themselves as engaged in higher educational or technical studies.

(ii) All the 62 ex-trainees who reported themselves as unemployed were, however, not continuously without a job after the completion of their training. Instead it was observed from the information supplied by them that 20 (32.2 per cent) of them had been employed at least once after training but were currently unemployed. In addition to that 5 (8.1 per cent) of them pursued educational or technical studies after completing the I.T.I. course and were now in search of jobs. Thus only about 37 (59.7 per cent) of the currently unemployed (or 27.8 per cent of the total respondent ex-trainees) had remained unemployed ever since the completion of their training in the Industrial Training Institutes. Two ex-trainees (1.5 per cent) had reported that they remained employed for some time after completion of the training but were now busy in studies, educational or technical and did not want a job for the time being.

(iii) As regards the duration of their unemployment, it was observed that 30.6 per cent ex-trainees remained in search of job for a period of one year and 35.6 per cent upto 2 years. About 24 per cent were unemployed for a period of more than two years. Only 6.4 per cent of the presently unemployed were in search of a job for less than 6 months.

### 28. Pattern of employment and unemployment of engineering graduates in Punjab

#### Coverage :

In 1971 the Economics and Statistics Department of the Government of Punjab conducted a study to determine the pattern of employment and the extent of unemployment among the engineering graduates of Punjab who passed out from the three engineering colleges located in the State during the years 1966, 1967 and 1968.

#### Objectives :

Specifically the object was to study :

- (i) the extent of unemployment among engineering graduates;
- (ii) the extent of migration of engineers outside the State;
- (iii) the proportion of engineering graduates who take up post-graduate studies;
- (iv) the extent of employment provided by the private sector; and
- (v) determination of correction factor for estimating the number of unemployed engineers on the basis of live register statistics.

#### The sample and the data :

Of the 1,070 engineering graduates belonging to Punjab who passed the courses during the years 1966 to 1968, 367 i.e., 90 from 1966 batch, 136 from

1967 batch and 141 from 1968 batch were selected. The required information was collected by mailed questionnaire method.

Of the 367 graduates addressed, 172 *i.e.*, 31 belonging to 1966 batch, 71 to 1967 batch and 70 to 1968 batch responded.

The reference period was the day on which the questionnaire was filled. A graduate engineer who was gainfully employed on the day of reporting was treated as employed and a graduate engineer who was without any job on the day of the survey but was available and seeking a job was treated as unemployed. Similarly, a graduate engineer who was neither employed nor looking for employment was treated as being outside the labour force.

#### Main findings :

Of the 172 respondents, 40.7% came from villages, 23.2% from small towns and the rest 36.1% from big cities.

From the information collected with regard to the current activity status of the engineering graduates it was observed that 68% were employed, 25% unemployed and 7% were pursuing higher studies. Faculty-wise break-up was :

Current activity status	Mech. Engg.	Civil Engg.	Electrical Engg.	Others	Total
Employed . . .	32	37	42	6	117
Unemployed . . .	5	9	17	2	43
Pursuing higher studies . . .	3	8	..	1	12
TOTAL . .	50	54	59	9	172

The time in finding employment after attaining the requisite qualifications is an important factor in determining the pattern of employment. This time lag which may be termed as the "waiting period" is an index of the readily availability or otherwise of jobs to absorb such personnels. The information collected in this regard revealed that 34.4% graduate engineers obtained jobs within 3 months of their passing examination, 17.6% had to wait for a period of 3 to 6 months, 31.3% could secure employment only after waiting for 6 months to a year and 16.7% had to wait for over a year to get employment.

The number of times a graduate engineer changes his employment is an other index of ready availability of jobs and satisfactory settlement in life of the person concerned. Taking this factor into consideration it was observed that 58.1% graduate engineers did not change their employment even once, 23.1% graduates changed their employment once, 16.2% twice, 1.7% thrice and only 0.9% changed their jobs more than 3 times.

As regards the employment of engineering graduates in the different sectors of employment it was observed that 86.3% of the graduate engineers got employment in the public sector and only 13.7% of them were absorbed in the private sector. Within the public sector the absorptive capacity of the semi-Government subsector like the State Electricity Board was larger than the other two sub-sectors *i.e.*, quasi-Government and local bodies. Electrical engineers were mainly absorbed by the State Electricity Board. Civil Engineers, on the other hand, were mainly employed by the State and Central Governments. In the private sector, Mech. engineers got better chances of employment than other engineers.

The survey also brought to light the fact that a sizeable proportion of graduate engineers leave the State for other States and countries either for the sake of the employment or for higher studies.

Of the 43 engineering graduates reported unemployed at the time of survey, 3 belonged to 1966 batch, 12 to 1967 and 28 to 1968 batch. Strictly speaking, all these were not continuously unemployed but include those who were employed at one time or another but were unemployed at the time of survey. In fact, 14 out of 43 had been employed at least once after graduation. The average period of employment of these 14 engineers was 9 months. Further, of the 43 engineering graduates currently unemployed, 9 remained unemployed for less than 6 months 7 more than 6 months but less than 12 months, 2 for more than 12 months but less than 18 months and 25 for more than 18 months.

Of the 43 unemployed, 36 were registered with the employment exchanges at the time of survey.

#### 29. Study of unemployment among released emergency commissioned officers in Punjab, by Directorate of Employment, Punjab

**Year of study :**

1971.

**Objectives :**

(i) To find out the extent of unemployment among the Emergency Commissioned Officers relieved after cessation of hostilities in 1962 and 1965.

(ii) To make suggestions for a speedy resettlement.

**Sampling design :**

All the 584 released emergency commissioned officers whose list had been received from the Chief Secretary, Punjab Government were addressed a questionnaire. Only 267 responded.

**Results :**

(i) Out of 267 persons who responded 136 (50.9%) were unemployed. Their distribution by rural and urban residence and age group was :

Age Group	Rural		Urban	
	Number	Percentage	Number	Percentage
22—25 . . . . .	..	..	2	1.4
26—30 . . . . .	25	18.4	45	33.2
31—35 . . . . .	21	15.4	27	19.9
36 and above . . . . .	9	6.5	7	5.2
	55	40.3	81	59.7

(ii) 48.6% of the unemployed were over 25 years at the time of their commission or training and hence were not eligible for Government service.

(iii) Duration of unemployment had been as follows :

Upto one year . . . . .	46.5%
Between 1 to 2 years . . . . .	33.0%
Above 2 years . . . . .	20.5%

(iv) Percentage distribution of unemployed officers by education and kind of jobs sought for was as follows :

Job Sought	Matric	Graduates (Arts)	Graduates (Sc.)	Post-Graduates (Arts)	Post-Graduates (Sc.)	LLB	B.Ed./ B.T.J/ M.Ed.	D.P. E.	Civil Engg.	Mech- anical Engg.	Others	Total
1	2	3	4	5	6	7	8	9	10	11	12	13
Executive/Administrative	.	8.8	8.8	9.7	..	3.0	0.7	..	0.7	0.7	0.7	24.8
Police N.C.C.	.	2.2	2.2	..	..	..	..	..	..	..	..	4.4
Teaching	.	.	..	..	..	..	0.5	..	..	..	..	1.5
Physical Education	.	.	..	..	..	..	..	0.7	..	..	..	0.7
Sports Coach	.	.	..	0.7	..	..	..	..	..	..	..	0.7
Mechanical Automobile Engg.	..	..	..	..	..	..	..	..	..	0.7	..	0.7
Many choices given	.	9.5	6.0	..	0.7	0.7	..	..	..	..	..	0.7
Any job	.	11.8	7.4	6.0	0.7	..	2.2	3.0	0.7	2.3	..	0.7
Job not clearly indicated	.	7.4	6.0	..	0.7	..	0.7	0.7	..	..	..	16.2
<b>Total</b>	<b>39.7</b>	<b>31.1</b>	<b>6.7</b>	<b>2.1</b>	<b>0.7</b>	<b>5.9</b>	<b>5.9</b>	<b>1.4</b>	<b>3.0</b>	<b>1.4</b>	<b>2.1</b>	<b>100.0</b>

(v) 28.0% sought jobs only in public sector. 72% were willing to take up job in either of the private or public sectors.

(vi) 91.2% were willing to go out of their native States while 8.8% wanted jobs within the native State only.

(vii) 94.9% were ready to go for interview or test at their own cost, while 5.1% were not prepared to bear the expenses.

### 30. Survey on employment of children in the age group 6-14 by Directorate of Economics & Statistics, Rajasthan, Jaipur

#### Year of study :

1962.

#### Coverage :

Urban—Towns of Rajgarh, Bhilwara and Pali.

Rural—Jhotwara, District Jaipur and Kherwara, District Udaipur.

#### Objectives :

(i) To estimate the proportion of the children in the age group 6 to 14 being employed in the Rural and Urban areas separately.

(ii) To find the impact on such employment of the size of the household, the economic condition of the household, the educational standard of the household, castes, occupation of the household and the availability of education facilities in the village.

(iii) To find out various vocations in which employment is provided to the children of the age group of 6 to 14 and to determine the percentage distribution of such employed children.

(iv) To ascertain the earnings of such employed children and their contribution to the average income of the family.

#### Design of survey :

From the selected towns, approximately 1% of the households from each town were selected at random. Total number of sample households were allotted to different wards & blocks according to their population. 1962 electoral rolls were used for sampling the households. From each of the selected Panchayat areas, 5 villages were selected at random and in such of the villages 20 households were selected through systematic random selection. 129 urban and 200 rural households were selected and surveyed.

#### Main findings :

(i) In urban areas, out of 12,364 households, 129 households were surveyed. In these households out of total number of 734 persons roughly 311 were children below 15 years of age.

(ii) In rural sector, out of 817 households, 199 households were selected for survey. Out of 1,191 (total population covered) roughly 39% (463) were children below 15 years of age.

(iii) The number of children in various age groups and the number of those having employment is given below :

Town/Block	Age Groups			6-10			11-14		
	0-5		No. of Persons	6-10		No. of Persons	11-14		No. of Persons
	No. of Persons	No. of Earners	Male	Female	Male	Female	Male	Female	Male
Urban									
Rajgarh	30	.. ..		8 ..			7 ..		
Bhilwara	43	.. ..		37 ..			14 ..		
Pali	83	.. ..		70 1			29 2		
<b>TOTAL (URBAN)</b>	<b>56</b>	<b>.. ..</b>		<b>115 1</b>			<b>50 2</b>		
Jhotwara	133	.. ..		62 10			15 9		
Kherwara	127	.. ..		92 ..			34 13		
<b>TOTAL (RURAL)</b>	<b>260</b>	<b>.. ..</b>		<b>154 10</b>			<b>49 22</b>		

(iv) In urban areas, the children were engaged in business, arts and crafts and other vocations. In urban areas, the monthly earnings amounted to Rs. 15-20 for the children employed in business and Rs. 20 and above for those employed in other vocations.

(v) In rural areas, agriculture was the main industry in which the children were employed and cattle grazing was next in order of importance. In rural areas the monthly earnings were less than Rs. 10.

### 31. Survey of rural employment, unemployment and under-employment in Rajasthan

**Year of study :**

1953.

**Coverage :**

The entire rural area of the State of Rajasthan.

**Concepts & definitions :**

The main objectives of the survey are enumerated as follows :

- (a) to give an adequate picture of the extent of employment, unemployment and under-employment in the rural areas of the State; and
- (b) to enable periodical assessment.

**Concepts :**

**Labour force :**

Labour force was to comprise of all persons who were either gainfully employed or were looking for gainful employment.

*Out-side labour force :*

This **category** consisted of persons who were not available for gainful work and included house-wives, students, permanently disabled persons, rentires, pensioners, beggars, vagrants, children below the age of 15 years who were not available for gainful work and old persons above the age 60 and who were not available for gainful work, inmates of medical, mental, penal and charitable institutions and others able but not available for works.

*Full employment :*

A person was considered to be fully employed if the total hours worked by him were equal to the total hours he was available for gainful work during the 7 days preceding the date of survey. A person without job but not at work for personal reasons like sickness, vacations, etc. and was not available for work was also considered as fully employed.

*Under-employment :*

If the number of hours worked by a person in labour force was zero in reference period and he was available and seeking work, he was to be considered as completely unemployed.

*Under-employed :*

If the number of total hours available for gainful work in the reference period was greater than the number of total hours worked, the person was deemed to be under-employed.

*Intensity of under-employment :*

It is defined as the ratio of the number of hours a person was unemployed to the number of total hours for which he was available.

*Household :*

Only normally resident members of the household were considered in determining the household composition for the enquiry. A normally resident member was considered to be one who normally passed his nights under the same roof and took food from the same kitchen. Guests were to be excluded and temporary absentees were to be included.

*Industry :*

Industry referred to the type of enterprise in which the person pursued his gainful work.

*Employment status :*

Employment status signified the capacity in which the person worked in gainful occupation, i.e., whether as an employee, own account worker, apprentice or an unpaid family enterprise worker.

*Sampling design :*

The design of the survey was rotating two-stage stratified random, where the villages and the households constituted the first and second stage sampling units respectively, and each selected village was surveyed four times in a year after an interval of three months. From each of the 232 Stage I, stage II, pre-

extension and shadow blocks three villages were selected at random. In the villages households were stratified as cultivators, agricultural labour and others. Six, four and two households respectively were selected from these strata by linear systematic sampling.

#### Main findings :

The pooled estimates for all the months place the persons in labour force at 45.77 per cent to the total population during June, 1963 to May, 1964. 79.86% of the persons were fully employed and 17.78 per cent were under-employed. The unemployed persons constituted 2.36 per cent of the persons in labour force. The number of persons in labour force varied between 40.82% of the total rural population in May, 1964 to 50.17% in October, 1963.

The percentage of persons in labour force to total population in the segment was the highest in case of cultivators ranging between 42.25 per cent in May, 1964 to 52.37% in October, 1963. In case of agricultural labourers, it ranged between 40.24% in April, 1964 to 50.08% in January, 1964. In case of others, it ranged between 32.23% in May, 1964 to 42.55% in March, 1964.

About 80% of the population in labour force reported themselves as fully employed except in the months of June, 1963 (63%), July, 1963 (73%) and February, 1964 (77%). The percentage of fully employed persons varied from category to category. It was the highest in case of Agricultural labour (69.84% in July 1963 to 89.80 per cent in November, 1963) and was the least in case of 'others' (84.46% in July, 1963 to 83.02% in August, 1963).

Unemployment did not appear to be prevalent on a large scale. Only in the months of April, May, June and July, the number of unemployed persons was 3.09%, 5.09%, 8.42% and 3.24% respectively of the total labour force. In all other months it had been below 2% heavy intensity of unemployment during this period was due to intense summer when agricultural operations in the State came to a stand-still. The unemployment was more or less similar in case of cultivators and agricultural labourers while it was less in case of 'others'.

The number of under-employed persons was found to be ranging between 10.55% in October, 1963 to 28.4% in June, 1963 in case of cultivators. The extent of under-employment was found more during the months of June, July, 1963 and January, 1964.

In case of agricultural labourers, the extent of under-employment ranged between 7.59% persons in May, 1964 and 25.71% persons in July 1964. The periods of intense under-employment were June, July and August.

In case of others, under-employment ranged between 16.44% persons in August, 1963 and 27.18% in July, 1963. The months when under-employment was intense were June, July, October, 1963, January and April, 1964.

The intensity of under-employment in case of cultivators ranged between 32.33% in December, 1963 to 49.48% in June, 1963. In case of agricultural labourers, it ranged between 31.41% in August, 1963 to 62.24% in April, 1964, and in case of others it ranged between 30.72% in August, 1963 to 59.28% in March, 1964.

**32. The occupational distribution of engineering personnel in Rajasthan by the Directorate of Manpower, Planning Department, Rajasthan, Jaipur**

**Objective :**

The study analyses an occupational pattern with regard to engineers and craftsmen in the manufacturing, construction and other industries in the public and private sectors in Rajasthan with a view to determining the relationship between engineers and craftsmen to the total employment as also the inter-se-ratios among various occupations separately for engineers and craftsmen.

**Reference period :**

The position as on 30th September, 1963, in case of manufacturing industries in the private sector and 30th September, 1964, for public sector undertaking was ascertained. The study covered :

**Coverage :**

- (a) all establishments in the private sector employing 25 persons or more and engaged in the non-agricultural activities.
- (b) all firms employing 10 to 24 persons in the 13 districts *viz.*, Jaipur, Alwar, Ajmer, Jodhpur, Bharatpur, Bikaner, Udaipur, Sawai Madhopur, Kota, Ganganagar, Pali, Sirohi and Bhilwara.
- (c) 2,416 establishments were selected in the public sector.

**Main findings :**

The study revealed that the engineers formed 2.08% of the total employment in the larger establishments and 0.17% of the total employment in the smaller establishments in the private sector. Among the engineers in the larger establishments, the mechanical engineers formed a highest number being 16.61% followed by the electrical engineers who constituted 10.42%.

In the public sector undertakings engineers constituted 1.11%. Among the engineers, Civil Engineers formed 58.68% followed by electrical engineers.

According to 1961 Census, the Engineers formed only 0.24% of the total employment in the manufacturing industries and 0.98% in the construction industry in both the public and private sectors and in both these industries, the Civil Engineers were 45.24% and 83.79% respectively.

Craftsmen formed 82.01% of the total employment in the larger establishments and 78.65% in the smaller establishments in the private sector. Among the craftsmen in the larger establishments, the spinners, piecers and winders with 19.63 per cent were predominant. They were followed by drawers and weavers who constituted 8.36%. In the smaller establishments, the charoot, cigar and bidi makers constituting 21.92% of the total were the highest.

In the public sector undertakings the craftsmen constituted only 9.13 per cent of the total employment. The inter-se-proportion showed that the mechanic repairmen with 12.43% were highest in number.

According to 1961 Census data, craftsmen fromed 89.61% of the total employment in the manufacturing industries and 87.28% in the construction industries in both the private and public sectors.

33. A study of wastage and stagnation in medical colleges in Rajasthan by Directorate of Manpower Planning Department, Jaipur

**Objectives :**

The study was undertaken in August, 1969. The main objective of the study was to find out the extent and magnitude of the wastage and stagnation in the medical colleges of Rajasthan, so that necessary measures could be adopted to avoid further wastage without effecting the quality. Wastage for the purpose of this study was defined as the proportion of students admitted to medical colleges in a given year who did not successfully complete their studies within a reasonable period fixed as eight years. Stagnation (time wastage) was similarly defined as the proportion of the students who took more time than the prescribed duration of the course to complete it but not more than three years above the prescribed duration of five years.

**Coverage :**

The study was restricted to three medical colleges which were established in 1961 or earlier. The required information in respect of each student was collected from the year the student was admitted to the medical college.

**Main findings :**

Wastage in technical education can be in three ways *i.e.*,

- (i) Under-utilisation of the sanctioned strength;
- (ii) students discontinuing the studies for one reason or the other; and
- (iii) students not completing their course within a reasonable period of time *i.e.*, eight years.

Practically all the three colleges have been utilising the sanctioned strength to their fullest capacity. Of the 2312 students admitted to medical course during 1946-48 to 1963-64, 2106 (91.9%) took 8 years to pass, 25 (1.08%) took more than 8 years to pass, 3 (0.13%) were continuing the studies even after 8 years and 97 (4.33%) discontinued their studies *i.e.*, total wastage. Thus during the period under study the total wastage was around five to six per cent.

As regards the stagnation *i.e.*, percentage of students taking more than five years but not exceeding 8 years to pass it was observed that 1.07% took six years to pass, 3.72% took seven years to pass, 0.99% took eight years to pass and 1.08% took more than eight years to pass. Thus the total stagnation or time wasted worked out to 16.78%.

34. Agricultural labour, wages and living conditions in Meerut, by R. C. Saxena

The study was undertaken in 1965 in Meerut district (Uttar Pradesh) on the wages and living conditions of agricultural labourers. For the purposes of this study, the problems of agricultural labourers were assessed in the district in 100 selected villages. 1,605 agricultural labour households and 1,764 agricultural labourers were interrogated in the selected villages. For the purposes of this study, all persons who were without jobs and were available for and seeking work, were categorised as unemployed.

It was concluded in the study that about 42.86 per cent of agricultural labourers were unemployed in the district for an average number of about 64 days in a year.

**35. A comparative study of well irrigation in Aligarh district, India by T. V. Moorti, U.P. agriculture university, March, 1970**

**Occasional Paper Number 29 Deptt. of Agricultural Economics, Cornell University, USAID Prices Research Project :**

This is a detailed study of the economics of well irrigation in Western Uttar Pradesh. A field survey was undertaken in Aligarh district which in its first stage was continued for over one year and later involved a series of small follow-up surveys. Emphasis was laid in the survey to collect detailed physical input-output data from a sample of farmers. The data were collected on a plot by plot basis so as to provide a very large number of observations for analysis of functional relationships.

**Main findings :**

No specific study on the extent of employment which may have been made available as a result of tube-wells, persian wheels and charsa has been made in the study. However, an attempt has been made to assess the gross value of output per permanent farm worker by size of farm and sources of irrigation of the 141 farms in Aligarh district in 1966-67 as follows :

Source of Irrigation	(Rupee/Permanent Worker)		
	Small	Medium	Large
State tube well . . .	1,600	2,900	..
Private tube well . . .	2,100	4,300	6,100
Persian wheel . . .	1,900	2,900	..
Charsa . . .	1,900	1,800	..
Average . . .	1,900	3,200	6,100

Assuming that with an increase in farm size, gross value per permanent farm worker had increased thereby indicating the fuller employment provided by the larger farms. This contrast was much greater with respect to farms irrigated by private tube-wells. The persian wheel and the charsa offered more scope for employment of labour in pumping more water as was evidenced by the greater quantity of water used per hectare on small farms than medium ones within those irrigation systems. It was concluded that the introduction of private tubewells increased gross income of small farm operations but widened the income gap between themselves and those with large farms.

**36. A socio-economic survey of Calcutta City, 1954-55 to 1957-58 by Shri S. N. Sen**

**Concepts :**

For purposes of this survey, an unemployed persons was defined as one who had no gainful occupation on the date of investigation, but who was actively seeking a job at the current rates of remuneration. This definition included

only those who were above the age of 14 years and excluded those persons who were obviously in search of work, but were trying to subsist temporarily on any job which became available. A graduate, for example, who had accepted private tuition on extremely part-time, irregular and purely temporary basis, but was searching for some regular gainful occupation, was not classified as unemployed in this survey. This definition of unemployment did not include all the unemployed persons. The unemployed women were defined as those who were non-earning women above the age of 14 and really seeking jobs. On the basis of these definitions all those persons between the age of 15 to 59, who were seeking work, but could not get any job, part-time or whole-time, temporary or permanent, ill-paid or well-paid were taken as unemployed. All those who had some gainful occupation, whatever its nature, were considered as employed.

#### Coverage :

The survey was confined to households, which had some fixed residence within the city. As the survey excluded all households or individuals who had no fixed address and certain special groups of population *i.e.*, those in jail, hospitals, boats, etc.), unemployment among such persons was not included in the data. Secondly, the survey related to the Calcutta municipal area as it was constituted in 1951. So unemployment in areas which had been added latter to the municipal area had not been included in the survey.

#### Main findings :

(i) According to the Survey, the percentage of job seeking population and of working age during the three rounds 1954-1957 was found to be as follows :

(ii) Job Seekers

Round			As Percentage of Population of Working Age	As Percentage of Total Population
1954-55 .	.	.	6.3	10.0
1955-56 .	.	.	6.1	9.2
1956-57 .	.	.	5.0	7.6

(ii) The survey revealed that the incidence of unemployment during the three rounds was the highest in the age group, 15-19 being nearly four to four and a half times the volume of unemployment among persons belonging to the working age :

Age Group	Percentage		
	1954-55	1955-56	1956-57
15-19	41.6	36.0	30.0
20-24	21.2	21.4	15.3
25-29	7.2	6.3	5.5
30-34	3.4	4.1	3.2
35-44	4.8	2.3	3.0
45-59	2.3	2.7	4.7

An analysis of the educational qualifications of the unemployed undertaken by the survey revealed that in 1956-57 while only 15.6 per cent of the unemployed were illiterate, nearly 22 per cent were persons with under-graduate and graduate qualifications. Nearly 60 per cent of the unemployed persons belong to the educated sections of the community having studied upto the tenth standard.

### 37. Labour market behaviour in a developing economy by Shri S. K. Basu, S. Ghosh and R. N. Banerjee, 1969

#### Objective :

The study was concerned with the labour market in the engineering industry of West Bengal. It was conducted by the Research Division of the Indian Institute of Social Welfare and Business Management, Calcutta. Based on the findings of similar market studies in other industries and regions, the study examined the nature of the labour market in the developing economy of India, supply and demand conditions of manpower and the extent of disequilibrium. The main aspects on which this study tried to focus attention were the nature of the labour market of the industry concerned, existing conditions of manpower supply and manpower demand, the extent of disequilibrium (shortage or surplus) in the market, the attitudes of workers and other categories of employed personnel towards the labour market opportunities and conditions of work as a whole, their mobility, job satisfaction and commitment levels, training facilities and training potentialities.

#### Coverage :

The survey covered (a) persons employed in engineering firms in the entire State of West Bengal and (b) unemployed persons, who according to their qualifications and experience were considered immediately employable in the industry. Out of the persons employed in the engineering establishments, the skilled and unskilled workers directly connected with the actual processes of production and the technical, managerial and supervisory personnel employed in the workshops of the establishments concerned were covered.

#### Concepts :

The authors have defined labour market as 'the complex of economic and social factors involved in the process through which employers recruit workers and workers seek employment'. In order to reveal the nature of the unemployment problem in the industry two important characteristics were analysed. First, reasons of unemployment and second, duration of the period of unemployment.

The various factors underlying lack of employment as obtained from the investigation are detailed in the table below :

It will be seen that the largest single group (40.88 per cent) of respondents were unemployed on account of the fact that they were new entrants in the labour market. The next highest group (35.50 per cent) of unemployed were jobless because of loss of their previous employment.

TABLE IV-1  
*Percentage distribution of under-employed and unemployed workers and technical, managerial and supervisory personnel according to the reasons*

REASONS OF UNEMPLOYED																		
Age Group	Loss of Employment			Seasonal Nature of Work			New Entrants			Physical Handicap			Other Reasons					
	TMS*	Other	Total	TMS	Other	Total	TMS	Other	Total	TMS	Other	Total	TMS	Other	Total			
	Per-Work- sonnel ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.	Per-Work- ers.				
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Below 30 years	5·84	20·44	26·20	..	..	..	14·60	25·55	40·15	..	1·45	1·45	0·73	2·92	3·65	7·30	10·95	18·25
30 years to 44 years	1·46	8·76	10·22	..	0·73	0·73	..	0·73	0·73	..	..	..	..	..	..	1·46	1·46	1·46
Above 44 years	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
<b>TOTAL</b>	7·30	29·20	36·50	..	0·73	0·73	14·60	26·28	40·88	..	1·45	1·45	0·73	2·92	3·65	7·30	12·41	19·71

\*TMS : Technical, Managerial and Supervisory.

**38. The beggar problem in metropolitan Delhi by Delhi School Works,  
Delhi**

**Year of study :**

1955-56.

**Objectives :**

The study was undertaken with the following broad aims :—

- (i) To make an approximate estimate of the total beggar population in Delhi;
- (ii) to make a study of a sample of individual beggars—their way of life, their attitudes to begging and to work and their willingness to be rehabilitated,
- (iii) to observe their community life; and
- (iv) to study the existing measures for tackling this problem and to make further recommendations.

**Design of survey :**

For estimating the total population the entire metropolitan area of Delhi was divided into 36 blocks keeping into consideration the areas in which beggars were found in larger concentrations. Total number of all such persons appearing to be beggars was counted in the morning in two days and in the afternoon on the other two days. The days included Tuesday and Saturday also when more beggars are reported to be on street. The averages of morning and evening added up to find out the total number.

For detailed survey 600 beggars (including about 93 from those detained in the Delhi Poor House, and 7 from real areas of Delhi) were selected. Street beggars were selected on a quota sample basis in proportion to the population of beggars on different streets.

**Broad findings :**

(i) The beggars population was estimated to be 3,000 approximately. Of these 2,100 were men and 900 women. A little more than 2,200 were adults and nearly 800 children. Between 1,100 to 1,200 were physically handicapped and the rest able-bodied.

(ii) 57% of the beggars belonged to Northern States of Punjab, U. P., Rajasthan and Delhi; less than 7% from Madhya Pradesh; and equal number from the Eastern States of Bihar, Bengal, Orissa and Assam; more than 4% from the Western States of Bombay and Saurashtra; and nearly 25% from the Southern States. In case of about 2% of the beggars the State of Origin could not be known.

(iii) 17% of the beggars were refugees.

(iv) Out of the 600 beggars interviewed, 508 (or 84.5%) were whole time beggars and 62 or 10.5% part-time beggars. They were working as part-time Jhalliwallas, shoe Shines, palmists, accompany bands, gas lamp carriers, agricultural workers, tonga helpers, cyclist helpers, hawkers, boot-leggers, other casual workers.

(v) 32% of the beggars were having some level of education. 108, (18%) read upto primary classes (did not pass class V examination); 58 (9.7%) had passed primary class (class V) examination; 25 (4.2%) had passed middle examination, and 6 (1.0%) has passed High School. Only one had studied beyond High School.

(vi) 60% of the beggars belonged to the families having some gainful occupation. 362 (61.7%) of the beggars had some gainful work prior to adopting begging.

(vii) Out of the 600 beggars, 252 (42.3%) were willing to give up begging. 202 of them were male and 50 female. Their distribution according to age group and conditions for giving up begging is given below :

Age Group	Number of Beggars Willing to Give Up if			
	(i) Other Beggars Give Up	(ii) Institution- alised	(iii) Work Provided	(iv) No Condi- tions at all
Below 10 years	.	.	3	1
11-15	.	1	25	9
16-20	.	1	3	4
21-25	.	..	8	1
26-30	.	..	11	4
31-35	.	..	4	3
36-40	.	..	13	9
41-45	.	..	2	4
46-50	.	..	2	4
51-55	.	..	7	3
56-60	.	..	8	7
61 years & above	.	..	2	4
	1	64	139	53

(viii) 41 beggars stated that they would like to take up the job they had prior to begging, 10 expressed preference for shoe keeping, seven for domestic service, two for agriculture, two for carpentry, two for tailoring, 27 for miscellaneous types of work and 96 for any work, i.e., they had no preference.

### 39. Occupational pattern in India (Private Sector) Part—I (1967) by Directorate General of Employment and Training

As a part of its programme for generating information on the employment market, the DGE&T have been conducting studies since 1958-59 of the occupational pattern of employees in the public and private sector establishments in alternate years.

**Coverage :**

The study undertaken related to the occupational pattern of employees in the private sector as at the end of September, 1967. The study covered 28,433 large sized establishments and 3,99,976 small sized establishments in the country. In terms of employment, occupational pattern data are available in respect of 38.78 lakh (68.0%) and 6.29 lakh (90.1%) of employees in the larger and smaller establishments respectively.

The occupational pattern of employees as revealed from the data collected was as follows :

*Percentage occupational distribution*

Occupational Division	Larger Establishments	Smaller Establishments	Total
Unskilled workers . . . . .	37·6	26·1	36·0
Craftsmen and production process workers . . . . .	34·7	23·1	32·9
Clerical & related workers . . . . .	8·0	9·2	8·2
Professional and technical workers including primary and middle school teachers . . . . .	8·8	22·2	10·7
Miners, Quarrymen and related workers . . . . .	5·0	0·2	4·4
Others . . . . .	5·9	19·2	7·8
<b>TOTAL</b>	100·0	100·0	100·0

The change in the occupational pattern of employees over a period of time in the larger establishments in the private sector was as follows :

Occupation/Division	Percentage Distribution			
	1961	1963	1965	1967
Unskilled workers . . . . .	40·8	38·7	37·6	37·6
Craftsmen and production process workers . . . . .	37·8	37·7	37·9	34·7
Clerical & related workers . . . . .	7·1	7·0	7·5	8·0
Professional and technical workers including primary and middle school teachers . . . . .	5·1	6·6	7·3	8·8
Miners, Quarrymen and related workers . . . . .	4·7	5·1	4·5	5·0
Others . . . . .	4·5	4·9	5·2	5·9
<b>TOTAL</b>	100·0	100·0	100·0	100·0

(Similar comparison was not possible in the case of smaller establishments due to differences in coverage of such establishments in 1961, 1963, 1965 and 1967). As stated earlier, occupational details of employees are collected in alternate

years from private and public sectors. Similar data collected from establishments in the public sector relates to September, 1966. Though the data collected in these two studies differ in regard to their coverage and pertain to different point of time, however, the distributional pattern of employees in the public and private sectors by broad occupational division was as follows :

Occupational Division	Percentage Distribution of Employees in	
	Private Sector 1967 (smaller & Larger Estab- lishments)	Public Sector 1966
Unskilled workers . . . . .	36·0	27·3
Craftsmen and production process workers . . . . .	32·9	8·8
Clerical & related workers . . . . .	8·2	14·2
Professional and technical workers including primary and middle school teachers . . . . .	10·7	25·3
Miners, quarrymen and related workers . . . . .	4·4	0·8
Others . . . . .	7·8	23·6
	100·0	100·0

Women employees constituted 18.2% in larger establishments and 17.6% in smaller establishments as against 16.4% and 20.5% respectively in 1965. The proportion of women and men employees to their respective totals in broad occupational groups was :

Occupational Division	Sex	Establishments	
		Larger	Smaller
Unskilled workers . . . . .	M	33·5	23·1
	W	55·9	40·2
	TOTAL	37·6	26·1
Craftsmen and production process workers . . . . .	M	36·4	24·9
	W	26·3	14·3
	TOTAL	34·17	23·1
Clerical and related workers . . . . .	M	9·4	10·9
	W	2·0	1·1
	TOTAL	8·0	9·2
Professional and technical workers including primary & middle school teachers . . . . .	M	8·0	18·2
	W	12·8	41·1
	TOTAL	8·8	22·2
Miners, Quarrymen and related workers . . . . .	M	5·8	0·2
	W	1·7	0·2
	TOTAL	5·0	0·2
Others . . . . .	M	6·9	22·7
	W	1·3	3·1
	TOTAL	5·9	19·2

The change in occupational pattern of women employees over a period of time in the larger establishments was as follows:

Occupational Division	Percentage Distribution of Women Employees			
	1961	1963	1965	1967
Unskilled workers . . . .	63·8	62·6	58·4	55·9
Craftsmen and production process workers . . . .	24·2	29·4	27·5	26·3
Clerical and related workers . .	1·5	1·3	1·6	2·0
Professional and technical workers including primary and middle school teachers . . . .	6·2	3·6	9·2	12·8
Miners, Quarrymen and related workers	2·6	2·2	2·1	1·7
Others . . . . .	1·4	0·9	1·2	1·2
TOTAL . . . .	99·7	100·0	100·0	100·0

Of the 38.78 lakhs employment in larger establishments in 1967, 20.31 lakhs (52.4%) were in establishments engaged in manufacturing industries. The occupational pattern in the manufacturing industries during 1961-67 was:

Occupational Division	Occupational Pattern of Employees in Manufacturing Industries Larger Establishments			
	1961	1963	1965	1967
Unskilled workers . . . . .	25·8	25·2	26·1	23·1
Craftsmen and production process workers . . . . .	63·7	63·6	61·3	60·7
Clerical & related workers . . .	6·3	6·2	6·6	6·7
Professional and technical workers including primary and middle school teachers . . . . .	1·9	2·3	2·0	2·9
Miners, Quarrymen and related workers	..	..	0·2	0·1
Others . . . . .	2·3	2·7	3·0	6·5
TOTAL . . . .	100·0	100·0	100·0	100·0

#### 40. Employment outlook for engineers 1969-79 by Institute of Applied Manpower Research, New Delhi

In 1969, the Institute of Applied Manpower Research, New Delhi, undertook a study to assess the demand for and supply of engineers.

##### Concepts :

The concept of unemployment in the case of engineers was defined as "involuntary idleness due to lack of work, excluding idleness due to labour dispute, illness or vacation." This means unemployed engineers are those who are included in the total stock of engineering manpower in the country, are seeking work and are without a job.

##### Data :

The data utilised for the purpose of this study related to the number of job-seekers among the engineers on the live register of employment exchanges after applying the necessary correction factors to overcome the limitation in such types of data.

##### Main findings :

The estimated number of unemployed engineering graduates and diploma holders derived on the basis of employment exchanges data after applying the necessary correction factors came to 56,700 at the end of 1963. Of the total estimated number of 56,700 unemployed engineers, 10,000 were graduates and 46,700 diploma holders. This came to about 17.1% of the total stock of 3,32,000 engineering graduates and diploma holders; the corresponding percentages for graduates and diploma holders were 7.5 and 23.6 respectively. The proportion of the unemployed to the total stock doubled between 1965 and 1968 while the number of unemployed engineers increased three fold during the same period.

In an analysis of the employment exchanges statistics on the subject undertaken by the DGE & T in 1967, it was observed that 96.5% of all engineering graduates and 85.6% of diploma holders on the live register and a waiting period of less than 12 months.

While comparing the number of engineers on the live register of the employment exchanges at the end of the year with the number of vacancies notified by employers during that year, it was observed that employment opportunities for engineers as well as the stock of engineers registered increased upto the year 1964 after which, the employment opportunities started to decline; the stock of engineers, however, continued to increase as a result of the progressive increases in the annual out-turn. This resulted in a sudden increase in a number of unemployed engineers as proportion of the stock of engineers. It is significant to note that it was at about the same time, i.e., in 1965 that unemployment amongst the engineers became clearly visible.

An effort was also made to measure the degree of under-employment. Under-employment among engineers was obtained as the difference of engineers employed and engineers actually needed to produce an output (P). In mathematically symbols it means that if :

$W_n$  is the number of workers needed to produce an out-turn (P) i.e., national income and  $W$  is the number of workers who actually participated in production; then

W-W<sub>n</sub> is the rate of under-employment.

W

Fitting a regression line between the data on national income and the engineers employed over a number of years in the past i.e., 1955-1964, taking the levels of employment and production in 1964 as an acceptable preposition, it was observed that for the level of output reached in 1968, the real demand was for 238 thousand engineers against which the number in employment was 275 thousand i.e., a difference of 37 thousand. The corresponding figures for 1967 were 213 thousand and 254 thousand i.e., a difference of 41 thousand engineers. This in a way reflect the magnitude of under-employment among engineers.

Working out the demands for engineers on the basis of the regression analysis under *normal* and *actual* conditions the following conclusions were derived from the study :

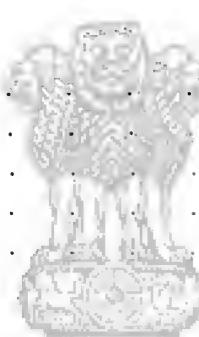
- (i) The deceleration of the rate of growth of the economy due to recession, etc. during 1965-67 seems to have resulted in a decline in the off-take of engineers; the net addition to the stock of the unemployed due to the recession is about 30,000 engineers.
- (ii) The increase in the admission capacity over and above the targets and their phasing during the Third Plan period have added 33,000 engineers to the stock of engineers by the end of 1968. Even if normal conditions had prevailed with no recession in the economy, there might have been an additional demand of only 6,000 engineers against this additional supply, leaving 27,000 engineers to swell the ranks of the unemployed in 1968.
- (iii) It would appear that out of total unemployment among engineers in 1968, about 53% is attributable to the effects of recession and 47 per cent to the increases in student admissions during the Third Plan over and above the original target.
- (iv) The full impact of the intake of 67,000 students during 1965-66 had not been felt by the end of 1968. In 1968, however, enrolment suffered a reduction which affects the supply of diploma holders from 1971-72 onwards and of graduates from 1973-74 (for a 5-year integrated degree course). Had the enrolment not been reduced in 1968, the increase in stock would have been about 82,000 by the end of 1973 as against an additional demand for 19,000 engineers, i.e., a surplus of 63,000 engineers.
- (v) It may also be noted that had there been no recession in the economy and no revision made of the targets for engineering education in the Third Plan, the supply of engineering manpower would have been in balance with the demand in 1968-69. But this demand would have corresponded to a rate of growth which was less than the original targets.

In 1968, the Government of India suggested that the annual admission to engineering colleges and polytechnics be restricted to about 15,000 and 37,000 respectively in the year 1968-69. As against this, the actual admission in 1968-69 were over 17,000 students to the degree course and about 27,000 students to the diploma courses.

Based on the actual admission made upto 1968-69 and assuming that admissions for the subsequent years at the same level, the additional outturn during the 4th and 5th years will be :

*Estimated out-turn of engineers from technical institutions 1969-78*

Year	Project Out-turn of Engineers		
	Degree Course	Diploma Course	Total
1969-70	18,215	27,877	46,092
1970-71	19,118	25,467	44,585
1971-72	20,446	15,857	36,303
1972-73	19,874	15,857	35,731
1973-74	14,329	15,857	30,186
	91,982	100,915	192,897
1974-75	14,329	15,857	30,186
1975-76	14,329	15,857	30,186
1976-77	14,329	15,857	30,186
1977-78	14,329	15,857	30,186
1978-79	14,329	15,857	30,186
	71,645	79,285	150,930



The future demands for engineers depend on the rate of growth of economy. Assuming an annual rate of growth of 4.8% per annum (low); 5.5% in the Fourth Plan and 6% in the Fifth Plan (medium); and 7% per annum (high), the demand for engineers at the end of 1973 and 1978 was estimated to be :

*Estimated demand for engineers at the end of 1973-74 and 1978-79*

Assumption	1973		1978	
	Total Engg. Manpower (including practicals)	Engg. Graduates and Diploma Holders	Total Engg. Manpower (including practicals)	Engg. Graduates and Diploma Holders
Low	493	357	711	513
Medium	530	384	824	593
High	607	439	989	710

Thus the demand for and supply of engineers during 1973 and 1978 would be:

*Demand and supply of engineers, 1973 & 1978*

*Figures in 000's*

Assumption	1973			1978		
	Demand	Supp.	Surplus (+) or Shortage (-)	Demand	Supp.	Surplus (+) or Shortage (-)
<i>Total :</i>						
Low . .	357		+128	513		+71
Medium . .	384	485	+101	593	584	-9
High . .	439		+46	710		-126
<i>Graduates :</i>						
Low . .	143		+66	205		+26
Medium . .	154	209	+55	237	258	+21
High . .	176		+33	284		-26
<i>Diploma :</i>						
Low . .	214		+62	308		+18
Medium . .	230	276	+46	356	326	-30
High . .	263		+13	426		-100

41. Civil engineers in India—stock demand and supply by the Institute of Applied Manpower Research, New Delhi

The study, taken up in 1971, is the third in the series of engineering manpower studies dealing with different specialities taken up by the I.A.M.R.

**Objective :**

The main objectives of this study were:

- (i) to assess the total stock of civil engineers in the country at the end of the Third Plan;
- (ii) to study the characteristics of civil engineering employment by educational, functional and industrial classifications as well as in the different employing sectors;
- (iii) to examine the status of demand and supply in this branch of engineering;

- (iv) to estimate demand for additional civil engineers during the Fourth and Fifth Plans especially for those with formal technical qualifications;
- (v) to project the likely additional supply in the future plans from existing educational programmes and institutions; and
- (vi) to bring out the implications of the demand for and availability of civil engineering manpower upto the end of the Fifth Plan period.

**Main findings :**

There were 63,700 civil engineers at the end of 1961 of which 21,700 were graduates and 42,000 were diploma holders in civil engineering. Between 1962 and 1965 the addition to civil engineering stock was 32,420—10,380 graduates and 22,040 diploma holders. Making allowance for retirement, death etc. among civil engineers the net stock of civil engineers as on 1-4-1966 was estimated to be 92,200—30,100 graduates and 60,100 diploma holders. Besides this, there were a large number of "practicals" performing engineering functions appropriate to diploma level persons without, however, possessing necessary formal technical qualifications.

The bulk of the civil engineers were employed in the public sector. Of the 90,200 civil engineers at the end of March, 1966 as many as 84,200 were employed in the public sector. The distribution of civil engineers by sector of employment and education was as follows :

*Distribution of civil engineers by sector of employment and education*

Sector of Employment	No. of Engineers			Percentage Distribution		
	Graduates	Diploma Holders	Total	Graduates	Diploma Holders	Total
Public Sector .	27,100	57,100	84,200	90·0	95·0	93·4
Private Sector .	3,000	3,000	6,000	10·0	5·0	6·6
TOTAL .	30,100	60,100	90,200	100·0	100·0	100·0

Of the 84,200 civil engineers employed in the public sector over 66,000 were in the State Government Departments and agencies and 18,000 in employing agencies of the Union Government and central public sector undertakings. Of these over 67% were diploma holders and 33% degree holders i.e., a ratio of two diploma holders to one engineering graduate.

The public sector agencies which employed 84,200 civil engineers reported a shortage of 4,513 civil engineers. The shortage of civil engineers came out to 5.4% of the total number of engineering posts available. The shortages were most pronounced for design, drafting and research as well as for maintenance. Besides these shortages, there were reports of surplus civil engineers in certain

categories. The overall position regarding shortage and surplus of civil engineers according to the main functions and activities were as under :

*Stock of civil engineers required as on 1-4-1966*

Category/Agency	In Position	Shortages *	Surplus *	Total Required
<i>I. Graduates :</i>				
1. State Governments . . .	21,197	1,190	62	22,325
2. Central Ministries . . .	4,700	410	41	5,069
3. Public Undertakings . . .	1,188	80	86	1,182
<b>TOTAL . . .</b>	<b>27,085</b>	<b>1,680</b>	<b>189</b>	<b>28,576</b>
<i>II. Diploma Holders :</i>				
1. State Governments . . .	45,292	1,827	810	46,309
2. Central Ministries . . .	10,223	810	69	10,964
3. Public Undertakings . . .	1,600	196	159	1,637
<b>TOTAL . . .</b>	<b>57,115</b>	<b>2,833</b>	<b>1,038</b>	<b>58,910</b>
<i>III. Total :</i>				
1. State Governments . . .	66,489	3,017	872	68,634
2. Central Ministries . . .	14,923	1,220	110	16,033
3. Public Undertakings . . .	2,788	276	245	2,819
<b>TOTAL . . .</b>	<b>84,200</b>	<b>4,513</b>	<b>1,227</b>	<b>87,486</b>

\*There was shortage for certain type of engineering activities and surplus for certain others.

Taking into account the shortages and surpluses of civil engineers together as on 1-4-1966, it was observed that the overall situation was not one of surplus but of shortage of civil engineers especially for the State Government and Central Ministries. As against 84,200 civil engineers employed, the level of activities in construction, maintenance, teaching, etc., in that year would have needed 87,486 civil engineers.

The demand for civil engineers for a specified year/years is closely linked with the investment proposed in the construction activities, outlay provided for the maintenance etc., for various types of public works i.e., agriculture, irrigation, industry, transport etc., etc.

The number of civil engineers employed for the outlay provided for maintenance of public works during the period from 1950-51 to 1968-69 revealed a linear relationship i.e.:

$$Y = 11863 + 287.6 X$$

Where Y is the number of civil engineers employed in public works (in 1000)

And X is the maintenance outlay (in crores of Rs.)

Assuming that this relationship will hold good in the subsequent years also the demand for civil engineers at the end of the 4th and 5th Plan periods can be estimated by fixing the value of X i.e., the likely magnitude of maintenance outlay.

Assuming that the outlay already provided for construction and maintenance of public works in the 4th Plan will be adhered to and the 5th Plan would aim at a 50% increase in the overall outlay, the demand for civil engineers during 1973-74 and 1978-79 would be 1,39,270 and 2,13,180 respectively. Adding to it the likely demand for civil engineers for teaching, research and other activities including the demand in the private sector, the total demand for civil engineers during 1973-74 and 1978-79 would be 1,56,500 and 2,39,500 respectively.

Assuming that the ratio of one graduate to two diploma holders as attained in 1965-66 should hold good for the next 10 years, the total demand for civil engineers during 1973-74 and 1978-79 by educational levels would be :

*Total demand estimates for civil engineers by educational level*

(No. in 000's)

Year	Graduates	Diploma Holders	Total
1973-74 . . . . .	52.2	104.3	156.5
1978-79 . . . . .	79.8	159.7	239.5

Assuming that the admission of students to the civil engineering courses continue at the same level as in 1968-69 i.e., 3,817 for degree course and 6,335 for diploma course, the stock of civil engineers will increase to 1,49,600 in 1973-74 and 1,65,800 in 1978-79. Thus the estimated likely demand of and projected supply for civil engineers in the year 1973-74 and 1978-79 will be :

*Demand for and supply of civil engineers, 1973-74 and 1978-79*

(No. in 000's)

Year	Demand	Supply	Surplus (+) Shortage (-)
<b>1973-74</b>			
Graduates . . . . .	52.2	55.2	(+) 3.0
Diploma Holders . . . . .	104.3	94.4	(-) 9.9
Total . . . . .	156.5	149.6	(-) 6.9
<b>1978-79</b>			
Graduates . . . . .	79.8	63.7	(-) 16.1
Diploma Holders . . . . .	159.7	102.1	(-) 57.6
Total . . . . .	239.5	165.8	(-) 73.7

## APPENDIX-II

### *Review of Statewise Data*

#### ANDHRA PRADESH

According to the 1971 census, the population of Andhra Pradesh was 43.39 millions, area 277.0 thousand sq. k.ms. and density 157. The increase in population during the decade 1961-71 was of the order of 20.60%—20.82% in the case of males and 20.37% in the case of females. While the population growth in the case of urban areas was 33.81%, in rural areas it was 17.81%.

#### **Working population :**

In the 1961 Census a person was regarded as belonging to the working population if he had some regular work of more than one hour a day throughout the greater part of the working season in the case of seasonal work and employed during any of the fifteen days preceding the date on which enumerated in the case of regular work. In the 1971 Census, however, a person was regarded as belonging to the working population if his main activity was participation in any economically productive work by his physical or mental activity. Work involved not only actual work but effective supervisions and direction of work. The reference period was one week in the case of regular work and last one year in the case of seasonal work. Thus the definition of "workers" adopted in the 1971 census was different from that adopted in the 1961 census and hence the working population obtained from these two censuses, strictly speaking, are not comparable. However, the working population enumerated during 1961 and 1971 Census are shown below in Table-1 :

**TABLE-1**  
*Percentage distribution of working population*

Census Year	No. of Workers (in millions)	Percentage as Distribution of Workers		
		Cultivators	Agri. Lab.	Other Workers
1961	P	18.66	40.11	28.59
	M	11.30	41.19	21.72
	F	7.36	38.47	39.13
1971	P	18.09	32.23	37.40
	M	12.67	37.68	27.48
	F	5.42	19.49	60.59

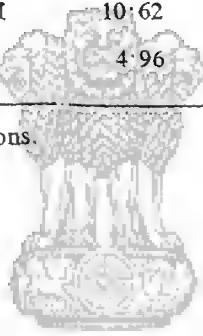
*Source : Census Publications.*

The rural component of the working population is shown in Table—2 :

TABLE-2  
*Percentage distribution of working force-rural areas\**

Census Year	No. of Workers (in millions)	Percentage Distribution of Workers		
		Cultivators	Agri. Lab.	Other Workers
1961	P	16·40	44·53	31·34
	M	9·61	47·11	24·63
	F	6·79	40·87	18·30
1971	P	15·58	36·49	41·68
	M	10·62	43·78	31·39
	F	4·96	20·89	63·70
				15·41

\*Source : Census Publications.



#### Working population vis-a-vis total population :\*

Subject to the limitations indicated in the preceding paragraphs, the working population as percentage of the total population by sex in the last two censuses was as follows :

*Working population as percentage of the total population by sex*

Census Year	Persons	Males	Females
1961	51·87	62·22	41·32
1971	35·92	48·40	23·13

\*Source : Census Publications.

### Working population by industry :

2.2 The industrial distribution of the gainfully employed persons according to 1961 and 16th, 20th and 21st Rounds of the NSS was as in Table—3.

TABLE-3

#### *Percentage distribution of working population by industry\*\**

Occupation	1961 Census		16th Round		Urban Labour Force Surveys	
	Rural	Urban	Rural	Urban	20th Round	21st Round
					Year (1965-66)	Year (1966-67)
1. Agri., lives-stock, forestry, mining, etc . .	78.92	19.46	86.45	30.47	23.4	22.9
2. Manufacturing . .	10.61	24.34	5.81	16.05	20.1	19.7
3. Construction . .	0.79	3.99	0.37	1.43	4.6	3.2
4. Trade and commerce	2.82	14.87	1.50	11.86	14.1	16.6
5. Transport, storage and communication.	0.39	7.71	0.62	7.47	8.1	9.4
6. Others . .	6.47	29.68	5.22	32.72	29.7	28.2
TOTAL . .	100.00	100.00	100.00	100.00	100.00	100.00

\*\*Source : Census and Report of the 16th, 20th and 21st Rounds of N.S.S.

### Working population by occupation :

The occupational distribution of workers according to 1961 census, 16th, 20th and 21st Rounds of NSS in respect of urban areas is shown in Table-4. Similar data for 1971 are not yet available.

TABLE-4

#### *Distribution of working population by occupation in urban areas*

Code No.	Description	1961 census	NSS Rounds		
			16th Round (1960—61)	20th Round (1965—66)	21st Round (1966—67)
0	Professional, technical etc. . .	5.25	3.55	5.7	5.9
1	Administrative, etc. . .	3.04	2.62	1.7	2.6
2	Clerical, etc. . .	7.84	7.83	11.1	11.6
3	Sales workers . . .	12.76	10.78	13.2	16.3
4	Farmers, etc. . .	19.13	30.22	20.5	20.7
5	Miners, etc. . .	0.49	0.10	1.5	1.6
6	Transport, etc. . .	4.62	7.39	6.5	6.8
7-8	Craftsmen, production process workers, etc. . .	36.08	21.75	28.4	24.2
9	Services, etc. . .	10.73	7.20	9.9	5.3
10	Other workers . . .	0.06	9.47	1.5	5.0
	TOTAL . .	100.00	100.00	100.00	100.00

Source : (i) Fact Book on Manpower in A. P.

(ii) Report on Urban Labour Force Surveys, A.P.

Occupation means the nature of work in which a person was actually engaged. The estimated 16th round percentages are invariably less than the census percentages except in respect of occupation division 4 i.e. farmers, fishermen, hunters, loggers and related workers, in division 6 i.e. workers in transport and communication and in division 10 i.e. workers not classified elsewhere.

#### **Labour force :**

The labour force comprises of gainfully employed and unemployed persons. The percentage distribution of males and females in labour force, employed and unemployed according to 1961 Census and 16th Round of NSS (1960-61) was as given Table-5 :

TABLE-5

*Percentage distribution of the labour force as employed and unemployed by sex*

	1961 Census		Rural		16th Round NSS		
	Labour Force	Em- ployed	Unem- ployed	Labour Force	Em- ployed	Unem- ployed	
All persons	. . .	45.24	45.07	0.17	46.19	45.02	1.17
Males	. . .	58.51	58.22	0.29	59.32	58.02	1.30
Females	. . .	31.45	31.41	0.04	32.42	31.37	1.05
<i>Urban</i>							
All persons	. . . .	34.51	33.48	1.03	34.16	32.87	1.29
Males	. . . .	54.16	52.40	1.76	53.13	51.17	1.96
Females	. . . .	11.25	11.09	0.16	14.89	14.29	0.60

Source : (i) 1961 Census.

(ii) 16th Round of N.S.S.—State Report.

Similar estimates were obtained in the 20th and 21st rounds of the urban labour force surveys (State sample only). The data are given in the Table-6.

TABLE-6

*Percentage distribution of population by sex and labour force status*

	20th Round (1965-66)			21st Round (1966-67)		
	Labour Force	Em- ployed	Unem- ployed	Labour Force	Em- ployed	Unem- ployed
All persons	. . . .	29.1	28.8	0.3	48.0	47.5
Males	. . . .	46.9	46.5	0.4	9.0	9.0
Females	. . . .	10.7	10.6	0.1	28.8	28.5

Source : Report on Urban Labour Force, 20th and 21st Rounds.

*Distribution of the unemployed persons in Andhra Pradesh by activity type, classified by sex and rural-urban-1961*

Activity	Rural		Urban		Total	
	Male	Female	Male	Female	Male	Female
Persons seeking employment for the first time . . .	0.27	0.01	1.57	0.05	0.56	0.02
Unemployed but seeking work . . .	0.08	0.01	0.75	0.03	0.23	0.01

*Source : Fact Book on Manpower in A. P., Bureau of Economics and Statistics.*

**The labour force by age-groups :**

The distribution of labour force by age-groups according to 1961 census and 16th round of NSS is given in Table—7.

**TABLE-7**  
*Distribution of labour force according to age 1961 census and 16th round of NSS*

Age-Group	1961 Census								16th Round							
	Rural				Urban				Rural				Urban			
	Male		Female		Male		Female		Male		Female		Male		Female	
Em- ployed	Unem- ployed	Em- ployed	Unem- ployed	Em- ployed	Unem- ployed	Em- ployed	Unem- ployed	Em- ployed	Unem- ployed	Em- ployed	Unem- ployed	Em- ployed	Unem- ployed	Em- ployed	Unem- ployed	
0—14 .	10.61	0.04	7.63	0.01	8.64	0.44	5.33	0.19								
15—59 .	93.78	0.52	50.76	0.05	92.18	1.85	50.36	1.66								
60+ .	79.89	0.10	24.30	0.03	62.93	1.74	15.40	0.73								
<b>TOTAL .</b>	<b>58.22</b>	<b>0.29</b>	<b>31.41</b>	<b>0.04</b>	<b>58.02</b>	<b>1.30</b>	<b>31.37</b>	<b>1.05</b>								
<b><i>Urban</i></b>																
0—14 .	3.55	0.12	1.57	..	3.17	0.05	0.85	..								
15—59 .	83.20	2.88	18.32	0.29	83.19	3.38	23.93	1.03								
60+ .	58.44	0.80	11.41	0.06	48.60	..	10.61	0.39								
<b>TOTAL .</b>	<b>52.40</b>	<b>1.76</b>	<b>11.09</b>	<b>0.16</b>	<b>51.17</b>	<b>1.96</b>	<b>14.29</b>	<b>0.60</b>								

*Source : (i) 1961 Census Reports.  
(ii) 16th Round of N.S.S.—State Sample.*

**Estimated labour force :**

The Labour force i.e. employed and unemployed in urban areas estimated on the basis of the pooled sample of the 16th Round of the NSS was as follows:

**TABLE-8**  
*Estimated labour force by age of group*

(In Lakhs)

	Labour Force by Ages					Total	Em- ployed	Unemployed		
	5.14	15.59	60+	ANS	Total			New En- tra- nts	Other es	Total
Males .	0.57	12.64	0.77	..	13.98	13.60	0.17	0.21	0.38	
Females	0.16	3.92	0.19	0.01	4.28	4.16	0.02	0.10	0.12	
<b>TOTAL .</b>	<b>0.73</b>	<b>16.56</b>	<b>0.96</b>	<b>0.01</b>	<b>18.26</b>	<b>17.76</b>	<b>0.19</b>	<b>0.31</b>	<b>0.51</b>	

**Labour force participation rates :**

The estimates of Labour Force Participation Rates among the population and the population of employable age group (15-59) obtained from the 1961 census and the State Marketing Samples of the NSS were as follows:

**TABLE-9**  
*Labour force as percentage of total population of the category\**

Category	State Half- Matching Sample of National Sample Survey 14th Round, 1958-59	State Sample of National Sample Survey 15th Round, 1959-60	Population Census 1961	Population Census 1951
Rural : Males .	62.9	59.9	64.5	
Females .	29.6	25.2	46.0	
Urban : Males .	53.0	46.3	53.5	
Females .	8.8	12.5	18.8	
Rural and Urban Combined :				
Males .	61.2	56.6	62.5	52.4**
Females .	26.1	22.2	41.3	21.1**

\* All workers and unemployed persons irrespective of the ages have been included.

\*\*Workers only. Does not cover unemployed.

TABLE-10

*Labour force as percentage of the category among employable age  
i.e. 15-59 only*

Category	State Half Matching Sample of National Sample Survey 14th Round 1958-59*	State Matching Sample of National Sample Survey 15th Round 1959-60*	State Matching Sample of National Sample Survey 16th Round 1960-61	Population 1961
Rural: Males	. 94.3	92.6	94.0	96.8
Females	. 47.6	38.5	52.0	71.9
Urban: Males	. 83.0	77.3	86.6	85.9
Females	. 14.5	20.4	24.1	30.1
Rural & Urban Combined :				
Males	. 93.2	89.9	92.7 +	94.8
Females	. 41.8	35.4	47.1+	64.6

\*Figures are for the age group 15-61 and not for 15-59.

+Weighted average of the corresponding rates observed in rural and urban; the weight being the proportion of population in urban and rural areas according to 1961 Census.

Source : Fourth Five Year Plan Manpower Study-I Planning Department Govt. of Andhra Pradesh.

#### Under-employment :

Apart from unemployment, the problem of under-employment was acute in the State. Information on labour time disposition of the gainfully employed persons collected during the 15th and 16th Rounds of NSS revealed that on an average gainfully employed persons in rural areas was at work for 6.11 days in a week while he was employed but not at work for 0.44 days. The number of days employed but not at work included days on which persons with jobs or enterprises were temporarily absent due to reasons such as illness, injury, vacation, holidays, etc. On an average a rural employed person was idle for want of work on 0.33 days in a week or 5% of the time.

In the urban areas, on an average, a gainfully employed person was at work for 5.3 days, employed but not at work for 1.06 days had idle due to want of work for 0.20 days in a week. The extent of under-employment in

urban areas, on an average, worked-out to be 2.9% of the time. The detailed data are given in the Table—11.

TABLE-11

*Average number of days at work, employed but not at work, idle due to want of work and not available for work in a week among gainfully employed persons*

(Figures are number of days in a week)

Activity	Rural (1960-61) All			Urban (1959-60) All		
	Males	Females	Persons	Males	Females	Persons
(Average number of days in a week)						
1. Employed and at work .	6.21	5.93	6.11	5.87	5.13	5.73
2. Employed but not at work	0.40	0.49	0.44	0.93	1.59	1.06
3. Idle due to want of work	0.29	0.42	0.33	0.18	0.28	0.20
4. Not available for work .	0.10	0.16	0.12	0.02	..	0.01
5. TOTAL . . . . .	7.00	7.00	7.00	7.00	7.00	7.00

*Source :* Based on the Socio-Economic Survey, 15th and 16th Rounds of NSS conducted by the Bureau of Economics and Statistics Hyderabad.

#### Measure of under-employment

The number of days idle due to want of work or mandays available for productive work but lost due to shortage of work provides a measure of under-employment. The information collected in respect of gainfully employed persons working less than specified number of hours and reporting availability for additional work collected during the 16th Round of NSS is presented in Table-12.-

TABLE-12

*Percentage gainfully employed working less than specified number of hours a week and reporting availability for additional work—Rural areas, 1960-61.*

	Hours at Work	Percent of the Total Employed Rural Areas
1. Working less than 28 hours a week and reporting as available for additional work.		3.23
2. Working 29-42 hours a week and reporting as available for additional work.		4.24
3. Working 43-56 hours and reporting as available for additional work.		3.70
4. Others reporting as available for additional work		0.80
TOTAL (Categories 1 to 4)		11.97

*Source :* Socio-Economic Survey, Andhra Pradesh, 1960-61, 16th Round Conducted by the Bureau of Economics and Statistics, Hyderabad

2. Estimates for 1956 and 1966 were arrived by assuming uniform compound rate of increase between the 1951-61 and 1961-71 respectively.

3. Estimates for 1976 were obtained by assuming the compound rate in (2) to continue till 1976.

#### **Duration of unemployment :**

The data collected on the urban labour force survey during the 20th and 21st rounds of NSS revealed that among unemployed males 42.10% were in search of employment for three months and below, 18.42% between 4-6 months, 10.53% between 7-9 months, 13.16% between 10-12 months and the remaining 15.29% were looking for employment for more than a year as per 21st round. About 42.42% of the unemployed males and 3.03% of the unemployed females were registered with the employment exchanges.

Similarly among unemployed males 32.7% were illiterate, 46.7% studies upto secondary, 13.37% secondary, 4.6% graduates and above and 2.9% had technical education. Among females 79.8% were illiterates, 13.9% studied upto secondary, 4.9% secondary, 1.48% had technical education.

#### **A study on utilisation pattern of graduates/post-graduates :**

A study conducted by the Bureau of Economics and Statistics, Government of Andhra Pradesh, on the utilisation pattern of graduates/post-graduates was conducted in the year 1968. It covered 1,077 graduates/post-graduates who passed out in the years 1959, 1961 and 1963 and 477 of them responded. The broad results of the study were as follows :

(i) Out of all the employed educated persons, considered in the sample, 72 per cent were able to secure employment within a period of less than 6 months, while 17.5 per cent could get it in between 7-12 months. As many as 4.1 per cent were able to secure employment only after a lapse of two years; almost all of these excepting one Engineering diploma holder, were Arts graduate. All the graduates in Agriculture and Medicine and 90% of the Engineering Graduates could find employment during a period of less than six months after leaving the college. Taking all the graduates in professional courses together, it was observed that 89 per cent got employed within a period of six months and the rest within another period of six months. In respect of diploma-holders in Engineering, however, only 54 per cent could find employment within a period of six months after leaving the institution. 81 per cent of the employed Science graduates could secure employment within a period of less than six months after leaving college. In respect of Arts graduates only 59 per cent could find employment during this period and about 12 per cent were reported to have been employed after a lapse of two years.

(ii) None of the graduates in professional subjects were engaged in occupations other than those for which they were trained. The same was not the case, however, in respect of Science graduates, some of whom were forced to seek clerical service.

(iii) The unemployment problem was more acute among Arts graduates than among Science graduates. Most of the graduates in Arts were in teaching profession and in clerical services. Among Science graduates a reasonable proportion were engaged in research work also. There was no unemployment among professional graduates while it was slightly felt among the diploma-holders in Engineering.

If a person working 28 hours or less during the reference week and reporting availability for additional work is generally treated as severely under-employed and similarly a person working 29.42 hours a week and reporting availability for additional work is treated as moderately under-employed, then the severe under-employment in rural areas formed 3.23 per cent of the employed (3.7 lakhs) and moderately under-employed formed 4.24% of the employed (4.8 lakhs). Out of the total gainfully employed persons in rural areas 11.97% (13.7 lakhs) reported as available for additional work.

#### Unemployment :

The 16th Round of the State Marketing Sample of NSS indicated that 3.38% males and 1.00% females of the age group 15-59 in urban areas and 1.89% males and 1.73% females in rural areas were unemployed in 1960-61. For the State as a whole, the unemployed comprised of 2.15% males and 1.60% females in the age group of 15-59. Adopting these rates of unemployment, it was estimated that the back-log of unemployment at the beginning of Third Plan was about 3.75 lakh comprising 2.17 lakh males and 1.58 lakh females. The additional new entrants into the labour force during the Third Plan period were estimated 12.59 lakhs. Thus a total of 16.34 lakh jobs were required for achieving full employment by the end of the Third Plan period. It was estimated that about 10.79 lakh jobs would have been generated during the Third Plan period. This would have left a back-log of 5.55 lakhs unemployed at the end of Third Plan period. (For details refer publication by the Department of Planning, Government of Andhra Pradesh).

#### Estimated employable :

The Government of Andhra Pradesh, Department of Planning, on the basis of certain assumptions (given below) estimated that the number of employable i.e. age group 15-59) will be 23.74 million in 1971 and 25.86 million in 1976. The relevant estimates are given in Table-13.

TABLE-13

*Estimates of employable (i.e. age group 15-59) in 1966, 1971 and 1976*

(Figures in million)

Year	Males	Females	Persons
1951	9.09	8.93	18.02
1956	9.59	9.40	18.99
1961	10.11	9.89	20.00
1966	11.02	10.77	21.79
1971	12.01	11.73	23.74
1976	13.09	12.77	25.86

NOTE : 1. Estimates for 1971 were arrived at by applying survival rates of 89.9 per hundred for males and 88.8 per hundred for females over the decade 1961-71 for the population of the age-group 5-49 in 1961.

(iv) Most of the graduates in the professional subjects such as Agriculture, Veterinary Science and Medicine were working in the State Government service only. Among the diploma holders and graduates in Engineering 33 per cent were employed in Central Government service. Most of the graduates in Arts could secure employment in the State Government services whereas the Science graduates could secure employment in both Central and State Government establishments.

#### **25th Round of N.S.S.:**

The 25th Round of NSS was canvassed primarily to study the economic conditions of the weaker section of the rural population. The rural population considered and covered were households, (i) having no cultivated land *i.e.* non-cultivator wage earner households and (ii) the lowest 10 per cent of households having cultivated land *i.e.* small cultivator households. The study was spread over 8,784 villages for the Central sample and 8,196 for the State sample. The results reproduced below relate to the State sample, pooled over all the sub-samples.

#### **Employment and unemployment :**

The percentage distribution of the estimated number of mandays spent *per week* in different types of economic and other activities by persons belonging to various age, sex and class of workers is given in Table-14.



TABLE-14

*Percentage distribution of estimated numbers of mandays spent per week under different types of economic and other activities by persons belonging to various age groups*

Distribution	Small Cultivator Households			Non-Cultivating Wage Earner Households		
	0·9	10·14	15·44	45·59	60+	Total
1	2	3	4	5	6	7
<i>Males</i>						
1. Worked in farm	.	1·4	26·6	71·1	71·9	44·5
2. Worked in non-farm occupation	.	0·4	5·0	16·7	10·8	10·6
3. Did not do any gainful work other than (i) & (ii)	96·9	58·8	6·4	7·2	29·0	39·5
(i) Seeking and/or available for work	0·1	1·1	3·9	4·6	2·9	2·5
(ii) Not available for work due to illness, injury etc.	1·2	1·6	1·9	5·5	18·3	2·9
<b>TOTAL</b>	.	100·0	100·0	100·0	100·0	100·0

TABLE-I4—*Contd.*

	1	2	3	4	5	6	7	8	9	10	11	12	13
	<i>Females</i>												
1. Worked in farm . . .	1·6	14·6	50·2	19·7	10·0	26·8	..	12·3	49·3	46·2	4·5	26·9	
2. Worked in non-farm occupation . . .	5·0	7·6	3·4	1·1	4·3	..	2·2	7·5	15·2	13·9	5·8		
3. Did not do any gainful work other than (i) & (ii) . . .	96·3	73·1	36·4	72·7	70·1	63·7	99·8	82·9	38·7	39·1	72·8	63·5	
(i) Seeking and/or available for work . . .	5·0	3·3	1·6	0·8	2·2	..	1·4	3·7	7·9	1·7	2·6		
(ii) Not available for work due to illness, injury etc. . .	2·1	2·3	2·5	2·6	18·0	3·0	0·2	1·2	0·8	1·6	7·1	1·2	
<b>TOTAL</b> . . .	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	
	<i>Persons</i>												
1. Worked in farm . . .	1·5	21·1	60·6	35·5	26·2	35·1	0·2	19·2	56·0	49·2	19·9	33·9	
2. Worked in non-farm occupation . . .	0·3	8·6	12·1	5·6	6·5	7·3	0·2	4·0	14·3	17·7	12·2	9·5	
3. Did not do any gainful work other than (i) & (ii) . . .	96·5	65·5	21·6	52·9	47·1	52·3	99·4	73·9	22·5	23·5	52·4	51·1	
(i) Seeking and/or available for work . . .	0·1	2·9	3·6	2·5	1·8	2·3	..	2·0	5·1	6·5	1·5	3·3	
(ii) Not available for work due to illness, injury etc. . .	1·6	1·9	2·1	3·5	18·4	3·0	0·2	0·9	2·1	3·1	14·0	2·2	
<b>TOTAL</b> . . .	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	

Source : N.S.S.—25th Round—Andhra Pradesh.

The table shows that the percentage of mandays available and/or seeking work was more *i.e.*, 3.3—4.1 per males and 2.6 per females—in the case of non-cultivator wages earner households than the percentage of 2.3—2.5 for males and 2.2 for females—in the case of small cultivator households. The breakup of the percentage of mandays available and/or seeking work in the case of non-cultivator wage earner households and small cultivator households by age-group were 2.0 for persons aged 10-14 years, 5.1 for 15-44 years, 6.5 for 45-59 years and 1.5 for 60 and above years and 0.1 for persons aged upto 9 years, 2.9 for 10-14, 3.6 for 15-44 years, 2.5 for 45-59 years and 1.8 for 60 and above years respectively. The breakup of the percentage of the estimated number of mandays available and/or seeking work for males and females by ages were 2.7 and 1.4 for persons aged 10-14 years, 6.5 and 3.7 for 15-44 years, 5.3 and 7.9 for 45-59 years and 1.3 and 1.7 for 60 and above years respectively in the case of non-cultivator wage earner households. The corresponding percentage for males and females in the case of small cultivator households were 0.1 and 0.0 for persons aged upto 9 years, 1.1 and 5.0 for 10-14 years, 3.9 and 3.3 for 15-44 years, 4.6 and 1.6 for 45-59 years and 0.8 and 2.9 for 60 and above years respectively. Similarly, the percentage of mandays spent/worked in other farms for salary and wages were more *i.e.*, 32.5—39.6 for males and 26.1 for females—in the case of non-cultivator wage earner households than the percentage of 26.5—30.9 for males and 22.8 for females—in the case of small cultivator households.

#### **Earnings :**

The average rate of earnings per manday by employees of different sex, **age** and class of workers engaged in agriculture and other occupations is given in Table-15.

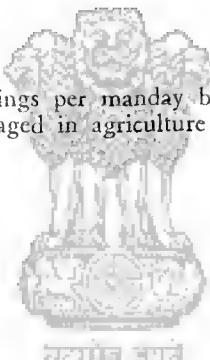


TABLE-15

*Average rate of earning per manday by employees of different age-sex groups engaged in agricultural and other occupations*

Age Group in Years	Average Earnings per Manday in Rupees		Average Earnings per Manday in Rupees	
	Small Cultivator Households	Non-Cultivating wage-Earner Households	For those who Worked in other Farms for Salary or Wages as Non-self Employed	For those who Worked in Non-farm Occupation as Non-self Employed
				
1. 0-9	· · ·	0·65	0·85	0·68
2. 10-14	· · ·	1·35	1·57	1·40
3. 15-44	· · ·	1·95	1·86	1·94
4. 45-59	· · ·	2·09	2·01	2·08
5. 60 and above	· ·	1·64	2·90	1·72
<b>TOTAL</b>	<b>1·92</b>	<b>1·86</b>	<b>1·91</b>	<b>2·10</b>
				<b>1·79</b>
				<b>2·04</b>

	Females	Persons
1. 0-9 .	0.57	0.57
2. 10-14 .	1.29	1.48
3. 15-44 .	1.51	1.44
4. 45-59 .	1.57	1.14
5. 60 and above .	0.99	1.75
TOTAL .	1.49	1.39
		1.48
		1.49
		1.39
		1.48
		1.48

Source : N.S.S.—25th Round — Andhra Pradesh.

The table shows that though the average earnings of all non-self-employed were almost the same in the case of non-cultivator wage earner households and small-cultivator households, the average earnings for those who worked in other farms for salary or wages were slightly more than for those who worked in non-farm occupations as non-self-employed in both the strata. The average earnings per manday for those who worked in (i) other farms for salary or wages and (ii) non-farm occupations as non-self-employed were Rs. 1.72—Rs. 1.92 for males and 1.49 for females and Rs. 1.71—1.86 for males and 1.39 for females respectively in the case of small cultivator households. The corresponding average earnings in the case of non-cultivator wage earner households were Rs. 1.81—2.10 for males and Rs. 1.49 for females—for those who worked in other farms for salary or wages and Rs. 1.66—Rs. 1.79 for males and 1.39 for females for those who worked in non-farm occupations as non-self-employed. The average earnings per manday worked for males were invariably more than the females in respect of each age group in both the strata. The persons who had the highest average earnings per manday worked belong to the age-group 49-59 years in the case of small cultivator households and 15.44 years in the case of non-cultivator wage earner households.

### ASSAM

According to the provisional population totals for 1971 Census, the population of Assam State was 14.95 millions, area 100.0 thousand sq. kms. and density 150. There were 901 females per 1,000 males.

#### 2.0 Working population :

Working population comprises of persons gainfully employed or participating in some economically productive work. The volume of working population is normally obtained from the decennial censuses. But due to constant changes in the definitions and concepts of the working population, the figures so obtained are not comparable from census to census. The work participation rates indicate the proportion of working population to the total population.

According to 1971 Census the work participation rate was 28.6 per cent. For males and females separately it was 48.9 per cent and 6.2 per cent respectively.

2.1 The data on the working population and its distribution among different occupations as observed from 1961 Census are given in Table-1.

TABLE-I  
*Percentage distribution of working population (1971 Census)*

Census Year	Area	No. of Workers (in million)	Percentage Distribution of Workers as											
			Cultivators				Agri. Lab.				Other Workers			
			P	M	F	P	M	F	P	M	F	P	M	F
1971	Total	4.28	3.84	0.44	56.4	59.8	26.8	9.4	9.8	4.9	34.2	30.4	68.3	181
	Rural	3.90	3.49	0.41	61.4	65.4	27.7	10.1	10.7	5.1	28.5	23.9	67.3	
	Urban	0.38	0.35	0.03	5.2	5.6	11.5	1.2	1.2	0.6	93.2	93.6	87.8	

However, the fact remains that the economy of the State of Assam is agrarian with as much as 56.4 per cent of its working population was engaged as cultivators and 9.4 per cent as agricultural labourers.

### 3.0 Unemployment :

#### 3.1 Objective & coverage :

With a view to assessing the magnitude of the unemployment in the State, the Department of Economics and Statistics conducted a sample survey or urban unemployment in the year 1963. The survey covered all the towns of Assam State as per 1961 census classification. The concepts and definitions adopted in the survey were, by and large, the same as followed by the N.S.S.

#### 3.2 Sample design and sample size :

A two-stage random sampling technique was adopted. The first stage sampling units were blocks within towns and the second stage households within selected blocks. In the first stage 20 per cent of the blocks were selected in a systematic manner with a random start. In the second stage of sampling two sub-strata were formed. The first sub-strata comprised of all the households which reported atleast one member as unemployed at the time of listing operations and the second sub-strata constituted 10 per cent of the rest of the households selected according to the principle of systematic sampling with a random start in each selected block.

#### 3.3 Reference period :

The reference period was the day of enquiry. Besides, three more reference periods were chosen viz. :

- (i) Any day during the week preceding the day of survey.
- (ii) The entire week preceding the day of survey.
- (iii) Any day during the month preceding the day of enquiry.

#### 3.4 Main findings :

(i) The urban population of the State in the year 1963 was estimated at 10.83 lakhs—3.96 lakhs (36.6 per cent) employed and 0.15 lakh (1.4%) unemployed and 6.72 lakhs (62.0%) outside the labour force. The component of labour force was thus 4.11 lakhs i.e. 96.3 per cent employed and 3.7 per cent unemployed.

(ii) Of the unemployed persons 20.4 per cent were illiterate, 11.2 per cent literate, 11.9 per cent with primary education, 22.8 per cent middle standard, 14.0 per cent below matric, 11.1 per cent matric and 8.57 per cent intermediate and above. Out of the total number of unemployment persons only 1.6 thousand i.e., 10.8 per cent possessed technical qualifications.

(iii) About 74.6 per cent of the unemployed persons belonged to the age-group 14-30 years 12.1 per cent to 30-45 years.

(iv) About 34.7 per cent were looking for work for more than one year, 13.0 per cent from 8-12 months, 18.9 per cent from 4.8 months and 22.7 per cent from 1.4 months.

(v) Of the 15.07 thousand unemployed persons 13.70 thousand were actively looking for jobs, 0.23 thousand not actively looking for jobs and the remaining 1.14 thousand were not intending to look for work though available for work. The never married persons of both sexes numbering 0.79 thousand predominated in the category of those who were not intending to look for work. The male married persons falling in this category were estimated at 0.23 thousand.

#### 4.0 25th Round of the NSS (1970-71) :

In the 25th round of the NSS a study was made of the economic conditions of the weaker section of the rural population. The design adopted was stratified two-stage which was self-weighting at the state level. The first stage units were villages which were selected circular systematically with equal probabilities in the form of two independent interpenetrating sub-samples and the second stage units were households. In all 8,784 villages were selected for the Central sample and 8,136 villages for the state sample.

In each selected village, all the households were divided into three sub-strata on the basis of (i) households having no cultivable land, (ii) the lowest 10 per cent of the households having a cultivated land and (iii) the remaining households. The household deriving more or less regular and major income in the last year from self-employment in trading establishments, manufacturing, mechanised transport, profession, rent etc. were excluded from both the sub-strata (i) and (ii) but included in sub-strata (iii). On an average, from each sub-strata about two sample households were selected. The weaker section of the rural population comprised of two groups. (1) small cultivator households of sub-strata (ii) and (2) non-cultivating wage earner households of sub-strata (i). A separate schedule in respect of sub-strata (i) and (ii) i.e., schedule Nos. 16.2 and 16.1 respectively was canvassed.

The type of information collected, analysed and published on a priority basis in both the schedule Nos. 16.1, 16.2 were (i) time disposition during the reference week of all the members of the household along with their demographic particulars as well as the earnings of the wage earner during the reference period, (ii) Possibilities of supplementing the income of the household from ancillary, agricultural and non-agricultural activities and (iii) willingness of the members of the household to move outside the village in the event of regular full time wage employment being offered to them, particularly in public works.

The results presented below pertain to the state sample and combine for all the sub-samples.

#### *Employment :*

The percentage distribution of persons belonging to the weaker section of the rural population by type of activity, sex, and age group are as given in table No. 2. The table reveals that the proportion of the number of mandays available for work was more in the case of non-cultivator wage earner households than the small cultivator households. Like-wise the proportion of mandays worked in non-farm occupations were more i.e. 3.1 per cent as self-employed in the case of non-cultivator wage earner households than in the case of small cultivator households i.e. 2.9 per cent as self-employed and 1.6% non-self-employed. The only exception as was expected, was that the proportion of mandays spent per week in own farm was more i.e. 13.9 per cent in the case of small cultivator households than the non-cultivator wage earner households i.e. 1.5 per cent.

*Earnings :*

The average rate of earnings per mandays by employees of different sex, age groups engaged in agriculture and other occupations separately for small cultivator households and non-cultivating wage earner households are given in Table-3.

The table reveals that the average rate of earnings of non-self-employed in the non-cultivating wage earner households was more than the non-self-employed in small cultivator households. In both the strata i.e. small cultivator households and non-cultivator wage earner households the average rate of earnings of males were higher than the respective female earnings. The average rate of earnings was highest in the case of persons aged 60 and above in the case of small cultivator households, while in the case of non-cultivator wage earner households it was highest for persons in the age group 45-49 years.



TABLE-2

*Percentage distribution of estimated number of man-days spent per week under different types of economic activities by persons belonging to various sex-age groups*

TABLE 2—Contd.

	1	2	3	4	5	6	7	8	9	10	11	12	13
	<i>Female</i>												
1. Worked in farm •	0·4	2·7	16·5	9·0	..	8·4	0·3	4·6	12·0	13·8	..	6·4	
2. Worked in non-farm occupation •	..	0·9	2·8	3·4	..	1·5	..	0·8	4·9	2·2	..	2·2	
3. Not engaged in gainful activity •	98·6	94·2	78·7	85·9	85·1	88·2	99·1	90·3	77·8	78·8	100·00	38·1	
4. Seeking and/or available for work including not available for work due to illness, leave, rest, etc. •	1·0	2·2	2·0	1·7	1·4·9	1·9	0·6	4·3	5·3	5·2	..	3·3	
Total •	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	
	<i>Persons</i>												
1. Worked in farm •	0·5	4·3	42·3	57·8	22·6	23·5	0·2	7·1	37·4	45·7	23·2	20·4	
2. Worked in non-farm occupation •	..	1·5	8·4	10·4	1·0	4·5	..	1·8	14·1	13·4	3·8	7·2	
3. Not engaged in gainful activity •	98·3	90·9	45·1	28·0	62·6	69·3	99·2	85·4	48·4	33·1	67·6	68·6	
4. Seeking and/or available for work including not available for work due to illness, leave, rest, etc. •	1·2	3·3	3·2	3·8	13·8	2·7	0·6	5·7	5·1	7·8	5·4	3·8	
Total •	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	100·0	

Source : N.S.S. 25th Round.

TABLE-3

*Average rate of earnings per manday by employees of different sex-age group engaged in agricultural and other occupations*

Age Group in Years	Small-Cultivator Households			Non-Cultivating Wage Earner Households		
	Average Earning per Manday			Average Earning per Manday		
	(in rupees)			(in rupees)		
	For those who Worked in other Farms for Salary or Wages	For those who Worked in non- Farm Oc- cupation as Non- self- employed	For all non-self- employed	For those who Worked in other Farms for Salary or Wages	For those who Worked in non- Farm Oc- cupation as Non- self- employed	
1. 0—9	. 0.86	. 0.86	..	..	..	..
2. 10—14	. 1.93	. 3.11	2.28	2.26	3.50	2.38
3. 15—44	. 3.71	. 3.53	3.68	3.78	4.41	3.89
4. 45—59	. 3.50	. 3.46	3.49	4.19	4.76	4.28
5. 60 & above	. 3.58	. 4.50	3.68	4.00	..	4.00
<b>TOTAL</b>	<b>. 3.63</b>	<b>. 3.51</b>	<b>3.61</b>	<b>3.77</b>	<b>4.42</b>	<b>3.89</b>
<i>Male</i>						
1. 0—9	..	..	..	..	..	..
2. 10—14	. 2.14	. 2.50	2.26	1.00	2.50	1.94
3. 15—44	. 2.62	. 2.56	2.61	3.01	2.76	2.96
4. 45—59	. 2.30	. 2.50	2.34	2.34	2.00	2.32
5. 60 & above	..	..	..	..	..	..
<b>TOTAL</b>	<b>. 2.59</b>	<b>. 2.55</b>	<b>2.58</b>	<b>2.92</b>	<b>2.68</b>	<b>2.87</b>
<i>Female</i>						
<i>Persons</i>						
1. 0—9	. 0.86	. 0.86	..	..	..	..
2. 10—14	. 1.98	. 2.94	2.28	2.17	3.23	2.34
3. 15—44	. 3.52	. 3.38	3.50	3.55	4.13	3.74
4. 45—59	. 3.43	. 3.39	3.43	4.03	4.49	4.10
5. 60 & above	. 3.58	. 4.50	3.58	4.00	4.00	4.00
<b>TOTAL</b>	<b>. 3.47</b>	<b>. 3.37</b>	<b>3.45</b>	<b>3.65</b>	<b>4.13</b>	<b>3.74</b>

*Source:* N.S.S.—25th Round.

## BIHAR

Bihar had a population of 5,63,32,246 according to 1971 census. It consisted of 51.12 per cent men and 48.88 per cent women. 89.96 per cent of the persons lived in villages and only 10.04 per cent in towns. The density of population was found to be 324 per square kilometre.

### 1-Labour Force :

#### 1. Extent of participation :

On the basis of the data made available from the 1971 census, the number of persons with some gainful activity and those who were without work but were in search for a job or available for it have been computed to assess the participation rates. The data are given in the Table-1.

**TABLE-1**  
*Number of persons in the labour force and their percentage in  
the population 1971 census*

Region/Sex	Number of Persons Classified as				Percentage of Persons with Gain- ful Work & Classified as Non-work others to the Population
	Workers	'Non- Workers' with Subsidiary Activity	Non- Worker "others"	Total	
<i>A. State :</i>					
(i) Male	1,50,89,137	1,700	3,69,300	1,54,60,137	53.69
(ii) Female	29,14,179	14,000	38,700	29,66,879	10.77
(iii) Persons	1,80,03,316	15,700	4,08,000	1,84,27,016	37.71
<i>B. Rural :</i>					
(i) Male .	1,35,92,589	1,400	2,74,700	1,38,68,689	54.03
(ii) Female	27,52,136	13,300	32,100	27,97,536	11.18
(iii) Persons	1,63,44,725	14,700	3,06,800	1,66,66,225	32.89
<i>C. Urban :</i>					
(i) Male .	14,96,548	300	94,600	15,91,448	50.83
(ii) Female	1,62,047	700	6,600	1,69,343	6.71
(iii) Persons	16,58,591	1,000	1,01,200	17,60,791	31.14

*Source :* (i) Census of India : Paper—I of 1971, Supplement.

(ii) B-Series data obtained from the Registrar General.

The data emanating from 1961 Census in respect of labour force are given in the Table-2.

TABLE-2

Region		Male	Female
State	.	55.79	27.13
Rural	.	56.12	28.50
Urban	.	52.57	10.44

*Source* : 1961 Census.

The participation rates indicated by the two censuses are not comparable due to the difference in the reference period and also in the approach. In 1971 Census no specific questions were asked to ascertain unemployment and participation rates, too, appear to have received scant attention.

### The NSS data:

The results of the 17th, 18th, 19th, 20th and 21st Rounds based on the central samples are given in the Table-3.

TABLE-3

Round	STATISTICS नियमित संख्या					Male	Female	Person
<i>Rural :</i>								
19th Round (1964-65)	.	.	.	.	.	50.93	17.20	33.70
<i>Urban :</i>								
17th Round (1961-62)	.	.	.	.	.	47.26	7.14	28.88
18th Round (1963-64)	.	.	.	.	.	49.23	7.50	30.45
19th Round (1964-65)	.	.	.	.	.	49.18	7.31	30.10
20th Round (1965-66)	.	.	.	.	.	48.42	6.65	29.31
21st Round (1966-67)	.	.	.	.	.	49.63	6.49	29.82

*Source* : I. NSS Report No. 17.3 (19th Rural Round).

1. NSS Report No. 10.
  2. NSS Report No. 12.7 (17th Rural Urban).
  3. NSS Report No. 15.2 (18th Rural Urban).
  4. Report No. 163 (19th Rural Round).
  5. Report No. 166 (20th Rural Round).
  6. Report No. 181 (25th Rural Round).

The NSS has used current status and a shorter period of seven days preceding the date of survey in ascertaining the employment or unemployment. It also considered the persons between the age group of 15 to 59 (both inclusive) to assess unemployment. These concepts being different from those utilized in the census make the NSS data further uncomparable.

No other estimates are available in respect of labour force in Bihar, and it is difficult to have any accurate assessment of the labour force. However, the NSS data in respect of urban labour force do evince a consistent trend.

## 2. Some characteristics of the labour force:

Sufficient data are not yet available from 1971 Census about the characteristics of the labour force, their distribution by age or educational standard. The State Statistical Bureau has not published any report in respect of the surveys conducted by it. Only the 17th Round Report of the National Sample Survey based on the Central samples provides some information for the period 1961-62.

(i) The percentage distribution of the labour force by age-group and age-specific participation rates in urban areas according to the 17th Round of the NSS are given in the Table-4.

TABLE-4  
*Percentage distribution of population in labour force by sex and age and participation rates by sex and age*

Age Group	Distribution by Age Group			Age Specific Participation Rate		
	Male	Female	Persons	Male	Female	Persons
0-4	.	..	..	..	..	..
5-9	.	0.04	0.03	0.12	..	0.06
10-14	.	1.66	1.05	1.58	5.83	0.69
15-19	.	8.68	5.13	8.15	40.48	6.21
20-24	.	13.24	9.67	12.80	74.01	9.62
25-29	.	16.31	16.64	16.35	97.58	15.86
30-39	.	26.93	24.25	26.60	97.72	13.50
40-49	.	18.69	17.05	18.49	95.42	16.08
50-59	.	8.93	18.18	10.08	83.23	26.57
60 and above	5.62	8.03	5.92	49.42	11.02	31.36
<b>TOTAL</b>	<b>.</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>47.26</b>	<b>7.16</b>
						<b>28.88</b>

*Source :* Report No. 127 of National Sample Survey issued by the Cabinet Secretariat, Government of India.

For rural areas, no such data are available. According to 1961 census the distribution of persons in the labour force according to the age group is given in the Table-5.

TABLE-5

*Percentage distribution of labour force by sex and age group and age-specific participation rates (1961 census)*

Age Group	Distribution by Age Group		Age Specific Participation Rate	
	M	F	M	F
0-14	7.96	9.15	10.16	6.34
15-34	46.91	48.57	89.73	43.76
35-59	37.30	37.11	97.72	50.00
60+	7.80	5.15	83.43	23.81
Age not stated	0.03	0.02	57.08	23.41
TOTAL	100.00	100.00	56.12	28.50

(ii) The percentage of workers among the labour force, as per 1971 Census and their distribution by industry group—cultivation, agricultural labour and other work—is given in the Table 6.

TABLE-6

*Percentage distribution of working population by broad industry group (1971 census)*

Region/sex	Per centage of Workers in the Labour Force	Percentage of Workers by Industry Group		
		Cultivation	Agr. Labour	Others
<i>State :</i>				
Male	99.27	47.28	33.01	19.70
Female	99.19	16.90	63.59	19.51
<i>Rural :</i>				
Male	99.61	51.55	35.63	12.82
Female	90.56	17.67	66.22	16.11
<i>Urban :</i>				
Male	95.24	8.54	9.30	82.16
Female	93.29	3.75	18.91	97.34

*Source :* (i) Census of India—Paper-I of 1971—Supplement published by the Registrar General.

(ii) B—Series data obtained from the Registrar General.

## II Under employment :

No data on under-employment are available for the State of Bihar.

## III Unemployment :

### (1) Extent and incidence of unemployment :

#### (a) Census Data :

The category of non-workers 'others' of the 1971 Census is expected to consist of the persons who were not having any gainful work either as their major activity or subsidiary engagement, and who could not be classified in the specific categories of non-workers and reported to be seeking work. The percentage of such persons in the population as well as labour force is given in the Table-7.

TABLE-7

*Data on "others" non-workers as per 1971 census*

Particulars		All Areas	Rural	Urban
1. Number of persons in the category non-workers 'others':	1. Male	3,69,300	2,74,700	94,600
	2. Female	38,700	32,100	6,600
	3. Persons	4,08,000	3,06,800	1,01,200
2. Percentage of :				
(i) Males among non-workers 'others'		90.51	89.54	93.47
(ii) Females among non-workers 'others'		9.49	10.46	6.53
(iii) Non-workers 'others' in the population		0.72	0.61	1.79
(iv) Non-workers 'others' in the labour force		2.21	1.84	5.75
(v) Non-workers 'others' in the male population		1.28	1.07	3.02
(vi) Non-workers 'others' in the male labour force		2.39	1.98	5.94
(vii) Non-workers 'others' in the female population		0.14	0.13	0.26
(viii) Non-workers female labour force		1.30	0.61	3.90

During 1961 census specific information was sought about the number of unemployed persons. The data on the extent and incidence of unemployment emanating from census are given in the Table-8.

TABLE-8

*Extent and incidence of unemployment as per 1961 census*

Particulars	All Areas	Rural	Urban
<b>Percentage of Unemployed persons :</b>			
i) to population . . . Males .	0.30	0.19	1.35
Female .	0.02	0.01	0.07
Persons .	0.16	0.10	0.78
ii) to labour force . . . Male .	0.53	0.34	2.57
Female .	0.06	0.04	0.70
Persons .	0.38	0.24	2.31
(iii) New entrants among unemployed persons .	63.88	65.21	61.99

#### The NSS Data :

The rate of unemployment based on the data of 17th to 21st Rounds of NSS is given in the Table-9.

TABLE-9

*The rates of unemployment as per NSS rounds*

NSS Round	Percentage of Unemploy- ed Persons to the Popu- lation			Percentage of Unemploy- ed Persons to the Labour Force		
	Male	Female	Persons	Male	Female	Persons
<i>Rural</i>						
19th Round . . . .	1.17	2.54	1.88	2.30	14.77	5.58
<i>Urban</i>						
17th Round . . . .	1.79	0.48	1.19	3.79	6.72	4.12
18th Round . . . .	1.04	0.17	0.65	2.11	2.27	2.13
19th Round . . . .	0.90	0.15	0.56	2.03	2.05	1.86
20th Round . . . .	0.53	0.06	0.32	1.09	0.90	1.09
21st Round . . . .	0.66	0.12	0.40	1.33	1.85	1.34

The NSS definitions of unemployment for urban and rural areas were different while the criterion in rural areas was simply availability for employment, in urban areas it was effective search of work.

As mentioned earlier the unemployment in the NSS Rounds meant absence of employment during the reference period of seven days. Thus the figures given in the Table-9 do not relate to the persons who are, usually without employment as in the censuses 1961 or 1971.

However, all the sources indicate that incidence of unemployment is more among the female labour force than in the male labour force. In the urban areas the extent as well as incidence of unemployment is more than that in rural areas.

## 2. Some characteristics of unemployed persons :

### (i) Age-wise distribution :

The distribution of persons classified by 1971 census as non-workers "others" is given in Table-10.

TABLE-10

*Percentage distribution of "other non-workers" by age group and sex*

Age Group	State			Rural			Urban		
	M	F	P	M	F	P	M	F	P
0-14 .	13.00	43.15	17.67	16.27	44.55	19.23	11.31	36.37	12.94
15-19 .	23.15	15.50	22.43	23.08	14.93	22.16	23.36	21.21	23.22
20-24 .	28.13	8.79	26.30	27.78	7.48	25.65	29.18	15.15	28.26
25-29 .	16.92	3.10	15.61	17.62	2.49	16.04	14.91	6.06	14.33
30-39 .	9.61	4.39	9.12	8.66	2.80	8.05	12.37	12.12	12.35
40-49 .	3.20	4.13	3.28	3.02	4.36	3.16	3.69	3.03	3.60
50-59 .	1.87	3.36	2.10	1.67	3.43	1.86	2.43	3.03	2.47
60 and above	1.98	17.32	3.43	1.71	20.25	3.65	2.75	3.03	2.77
Age not specified	0.14	0.26	0.15	0.18	0.31	0.20	..	..	..
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : B—Series Data.

### (ii) Age, Sex specific percentage of other non-workers to the population :

The distribution of population by age-group alone is available for the State as a whole and rural areas. Sex-wise breakdown of the data are not

available. On the basis of the available figures, the age specific percentage of other non-workers is given in Table-10-A.

TABLE-10-A

*Age-specific percentage of "other-non workers" in Bihar State  
(1971 census)*

Age Group	Percentage of Unemployed Persons to the Population		
	Rural	Urban	State
0-14 . . . . .	0.07	0.57	0.30
15-19 . . . . .	1.71	4.57	2.04
20-24 . . . . .	2.07	5.74	2.49
25-29 . . . . .	1.33	3.19	1.53
30-39 . . . . .	0.38	1.58	0.51
40-49 . . . . .	0.20	0.68	0.25
50-59 . . . . .	0.19	0.86	0.25
60 and above . . . . .	0.37	1.07	0.42
Age not specified . . . . .	15.00	..	12.00
	TOTAL . . . . .	0.60	1.80
			0.72

*Source : B-Series data obtained from the Registrar General.*

In the age group 15 to 59 the percentage of other non-workers to the population was 1.11 in the State, 0.91 in the rural area and 2.76 in the urban area.

On the basis of the sex-wise projected figures of population by age group (quoted in the Revised Series of Population Projections for official use in the light of the 1971 census age distribution issued by the Registrar General) it is found that in the age group 15-59 the percentage of 'non-workers others' was 1.63 among men, 0.08 among women and 0.88 among all persons. The provisional figures are available for the State as a whole and not for rural and urban areas separately.

(iii) Distribution by educational standard :

In the Table No. 11 the distribution of the Non-Workers "Others", belonging to the age 15 and above by educational standard is given. For the persons in the age group 0-14, this information is not available.

TABLE-11

*Percentage distribution of non-worker "others" and 15 above by sex, age group and educational standard, (1971 Census)*

Educational Standard	Percentage by Age Groups										Total			
	15—19			20—24			25—29			30 & above				
	M	F	M	F	M	F	M	F	M	F				
<i>Rural</i>														
1. Literate . .	40.38	65.22	18.61	79.17	19.21	87.50	49.50	97.98	80.00	100.00	30.43	86.53	34.46	
2. Literate below primary . .	11.51	15.22	5.37	4.17	5.17	..	11.58	..	..	..	..	8.13	4.49	7.87
3. Primary . .	9.62	2.17	5.37	..	5.37	..	7.79	..	..	..	..	6.96	0.56	6.50
4. Middle . .	20.98	13.04	22.80	4.16	23.35	12.50	13.28	..	20.00	..	20.70	4.49	19.53	
5. Matriculation or Higher Secondary . .	17.19	4.35	39.19	12.50	34.30	..	14.97	0.01	..	..	27.65	3.37	25.91	
6. Non-technical diploma or certificate not equivalent to degree . .	..	..	..	..	0.20	..	0.24	..	..	..	0.09	..	0.08	

7. Technical diploma or certificate not equivalent to degree	0·16	..	1·32	..	0·83	..	0·48	..	..	..	0·74	..	0·69
8. Graduate and above	0·16	..	7·34	..	11·57	..	2·16	0·01	..	..	5·30	0·56	4·96
TOTAL	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
No. of persons	63,400	4,600	76,300	2,400	48,400	800	4,400	9,900	500	100	2,47,800	2,30,000	17,800

Educational Standard	15-19			20-24			25-29			30 and above			Age not specified			Total
	M	F	M	M	F	M	M	F	M	M	F	M	F	M	F	
<i>Urban</i>																
1. Illiterate .	33.03	21.43	20.29	20.00	24.82	..	41.79	50.00	..	..	29.56	28.58	29.51			
2. Literate below primary .	9.05	14.29	6.88	..	9.22	..	8.46	14.29	..	..	8.22	9.52	8.29			
3. Primary .	14.03	7.14	6.16	..	4.96	..	4.48	..	..	..	7.63	2.38	7.38			
4. Middle .	26.24	28.57	25.00	..	25.53	..	20.90	21.43	..	..	24.43	16.67	24.06			
5. Matriculation or Hr. Secondary	14.48	21.43	28.63	10.00	21.27	50.00	17.41	..	..	..	20.98	14.28	20.6			
6. Non-technical diploma or certificate not equal to degree	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
7. Technical diploma or certificate not equal to degree.	..	..	..	..	2.13	..	..	..	..	..	..	0.36	..	0.34		
8. Graduate degree other than technical degree,	2.72	7.14	13.04	50.00	8.52	25.00	4.48	7.14	..	..	7.51	19.05	8.06			
9. Post Graduate degree other than technical degree .	0.45	..	..	20.00	2.13	..	1.99	7.14	..	..	0.95	7.14	1.25			



(iv) Unemployment among graduates;

The special card circulated in the 1971 census for ascertaining the activity particulars of the graduates and technical persons, was filled in by 128,959 persons including 91.48 per cent men and 8.52 per cent women. Out of these respondents 24.78 per cent persons reported to be unemployed. Among male respondents the percentage of unemployed persons was 24.62 and among female respondents it was 26.50.

In the absence of data about the existing stock of graduates and technically qualified persons it is very much difficult to assess the extent of unemployment among them.

However, the date in respect of the percentage distribution of unemployed person among the respondents by subject field and duration of unemployment are given in the Table Nos. 12 and 13.

TABLE-12  
*Percentage distribution of unemployed graduates by subject field and educational standard (1971 census)*

Subject field	Percentage of Unemployed Per- sons Among Respondents	Percentage Distribution of Unemployed Persons by Educational Standard and Subject field								
		M	F	M	F	M	F	M	F	M
		Doctorate	Master/Degree/ Post-graduates	Bachelor's Degree	Diploma	Certificate				
1. Arts & Humanities	25.70	27.54	0.07	0.41	25.56	30.17	74.21	69.34	0.68	0.08
2. Commerce	20.80	18.75	..	..	9.97	11.11	89.97	88.89	0.06	..
3. Agriculture	17.26	..	..	..	5.48	..	80.93	..	13.59	..
4. Veterinary Medicine	10.83	40.00	..	50.00	1.65	..	97.52	50.00	0.83	..

5. Science.	.	31.40	26.22	0.11	0.55	9.18	32.05	9.52	67.40	0.13	..	0.08	..
6. Engineering and Tech.	17.54	21.52	0.09	..	1.87	6.88	40.44	47.06	56.77	47.06	0.83	..	..
7. Medicine (Allopathy)	6.12	11.54	0.54	2.38	4.30	21.43	81.18	76.19	13.98	..	..	..	..
8. Medicine (others)	5.72	27.78	..	..	22.22	20.00	41.67	20.00	36.11	60.00	..	..	..
9. Nursery	7.58	3.49	..	..	..	..	40.00	35.35	7.00	33.33	..	33.33	..
10. Technical & Vocational Training	43.02	16.66	..	..	0.58	..	0.78	..	26.60	..	72.04	100.0	..
11. Others	14.48	15.09	3.64	25.00	25.45	25.00	14.55	37.50	38.18	..	18.18	12.50	..
12. TOTAL	*	24.62	26.50	0.08	0.55	18.27	29.48	74.71	68.85	5.49	0.48	1.44	0.17

Source : G-- Series data obtained from the Registrar General.

TABLE-i3

*Percentage distribution of unemployed graduates by duration of unemployment (1971 Census)*

Subject Field		Duration in Months										Per cent not specified	
		0-6		7-12		13-24		25 & above		M		F	
M	F	M	F	M	F	M	F	M	F	M	F	M	F
1. Arts and Humanities	12.07	13.01	8.85	6.99	17.99	15.45	43.16	42.47	17.91	19.11			
2. Commerce	13.27	..	9.02	22.22	18.67	16.11	40.44	44.44	18.60	22.22			
3. Agriculture	21.30	..	12.78	..	24.34	..	30.42	..	11.56	..			
4. Veterinary Science/ Medicine	31.40	..	15.57	100.00	32.23	..	19.01	..	5.79	..			
5. Science	19.76	20.82	14.41	10.41	25.55	13.57	26.49	46.27	13.82	14.53			
6. Engineering & Tech- nology	25.69	11.76	10.40	17.65	21.29	17.65	32.04	23.53	10.53	29.41			
7. Medicine (Allopathy)	15.05	19.05	8.07	7.14	19.39	21.43	31.72	38.10	25.27	14.28			
8. Medicine (others)	16.69	..	2.78	20.00	27.78	20.00	27.73	40.60	25.00	20.00			
9. Nursing	20.00	..	..	..	..	..	60.00	..	40.00	10.00			
10. Technical and Voca- tional Trades	9.90	..	13.01	..	15.34	..	45.05	100.00	16.70	..			
11. Others	5.46	..	10.91	12.50	25.45	12.59	35.36	50.36	24.32	25.00			
12. Total	15.09	13.91	10.32	9.31	20.67	15.32	33.43	42.86	16.35	13.65			

Source : G-Series Data obtained from the Registrar General.

## (c) Employment exchange data on unemployment :

(i) The data about average monthly registration and placement and the number of job-seekers borne on the live register of employment exchanges in Bihar, given in Table No. 14 will reveal the tight position existing in respect of employment opportunities during the last six years.

TABLE-14

*Average monthly registration placement and present rise in the number of registrants during 1969-72*

Year	Average Monthly Registration	Average Monthly Placement	Percentage of Replacement to Registration	No. of Persons on Live Register at the end of the Year	Per cent Rise over 1966
1966 . .	21,733	2,556	11.7	2,16,088	..
1967 . .	24,117	1,902	7.8	2,40,256	111.18
1968 . .	25,674	1,966	7.6	2,67,010	123.57
1969 . .	27,685	2,322	8.39	2,87,742	133.16
1970 . .	33,307	2,302	6.91	3,18,706	147.49
1971 . .	35,502	2,906	8.19	4,19,668	194.21
1972 (upto June, 1972)	56,998	2,684	4.71	6,64,162	307.36

*Source : Data obtained from Directorate General of Employment and Training, New Delhi.*

(ii) The distribution of job seekers on the live register of employment exchanges in Bihar by age group, sex and educational standard is given in the Table-15.

TABLE-15

*Percentage distribution of job seekers on the leave register of employment exchanges on 31-12-1971  
by sex, age and educational standard*

Educational Level	AGE GROUPS												No. of persons					
	Upto 14 years*		15-19		20-24		25-34		35-44		45-54							
	M	F	M	F	M	F	M	F	M	F	M	F						
1. Illiterate and below middle	26.64	...	22.98	54.48	44.28	56.04	57.72	70.44	63.17	79.05	67.48	100.00	28.37	..				
2. Middle School Standard	54.67	...	13.79	13.28	15.34	8.46	14.99	5.46	15.71	6.67	14.79	...	22.70	..				
3 . Matriculates	*	11.21	..	39.56	18.12	22.93	15.21	14.69	6.23	7.18	0.95	9.78	..	24.11	..			
4. Higher Secondary/ Intermediate/Under graduates	7.48	..	15.95	11.22	8.60	8.08	5.61	3.86	5.36	0.48	5.03	..	16.31	..	8.62	7.60	35.427	650
5. Graduates	*	..	7.28	2.90	8.77	11.44	6.13	9.89	7.42	11.43	2.71	..	8.51	..	8.49	9.15	31.914	7
6. Post-Graduates	..	..	0.43	..	0.53	0.76	0.86	4.12	0.64	1.43	1.20	..	..	..	0.30	1.37	2.452	11
Total	*	100.00	..	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	..	100.00	100.00	100.00	100.00	4,11,117	8,551

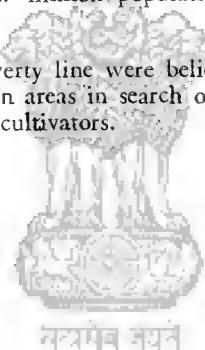
Source : Data obtained from the Directorate General of Employment & Training, New Delhi.

The employment exchange data do not help in assessing the magnitude of unemployment due to their incomplete coverage and optional registration on the part of unemployed persons. Besides there are employed persons also on the live register, registered for better employment opportunities. The NSS has been covering the extent of unemployed persons seeking registration, but specific data for Bihar are not available. All-India data are available for urban areas only upto 21st Round (1966-67). In the year 1968 the Directorate General of Employment Exchanges conducted a survey to ascertain the proportion of rural and urban registrants and employed persons registered with the employment exchanges but the enquiry was not conducted on sample basis and did not cover the whole of the State. Hence on the basis of the results of that enquiry it is not appropriate to arrive at any conclusion.

#### **The poverty Line :**

Rath and Dandekar in the "Poverty of India" have mentioned that in 1961-62, in the rural areas of Bihar, 37.38 per cent of the population was lying below the poverty line with an inadequate intake of calories and monthly per capita expenditure class Rs. 13-15, or having per capita annual consumption expenditure of Rs. 169. In urban areas the percentage of population below the poverty line was 41.28. Calculations made on the same basis by the Federation of Indian Chambers of Commerce & Industry reveal that on 1st October, 1969, in Bihar 49.4 per cent of the 54.7 million population of the State was below the poverty line.

The persons below the poverty line were believed to be the unemployed persons who had migrated to urban areas in search of jobs, rural agricultural labourers, wage earners and small cultivators.



## IV Special Survey : -

## IV. Twenty Fifth Round of N.S.S. (1970-71) :

The survey covered the weaker section of the population in rural areas comprising two groups :

- (i) the lowest ten per cent of the households having cultivated land and (ii) households having no cultivable land and deriving major part of their income from wage paid manual labour. The estimated total number of households in the two groups were 581,500 and 1,308,150 respectively.

The findings of the survey are detailed in the subsequent paragraphs.

(i) *Extent of participation in labour force, unemployment and its incidence :*

In Table No. 16 the percentage distribution of the available mandays spent per week in labour force and the extent of unemployment as percentage of man-days seeking and/or available for work is given.



TABLE 16

*Percentage of mandays in labour force to the total available mandays in a week and extent and age-sex specific incidence of unemployment by age and sex and household groups*

Age Group	MALE		FEMALE		PERSONS	
	Mandays in Labour Force with Work		Mandays in Labour Force With work		Mandays in Labour Force with Work	
	At Work	Absence due to Rest	Total Unemployment	At Work	At Work	Absence due to Rest
<i>A—Small Cultivators' Households</i>						
0-9	0.8	0.3	0.1	1.2	0.7	0.7
0-14	14.9	1.3	3.3	19.5	16.9	0.5
15-44	85.5	1.2	5.5	92.2	5.97	1.2
45-59	82.2	3.3	4.1	89.6	4.58	5.4
50 and above	50.6	9.1	..	59.7	..	15.0
TOTAL	47.3	1.3	3.2	51.8	6.18	27.0
					1.4	2.2
					30.6	7.19
					38.1	1.3
					2.8	42.2
					..	6.64
<i>B—Non-cultivating Wage Earner Households</i>						
0-9	0.6	0.2	0.8	25.0	..	..
0-14	22.3	1.7	5.7	29.7	19.19	6.9
15-44	82.8	1.9	8.2	92.9	8.83	46.5
45-59	82.4	4.0	7.0	93.4	7.49	41.1
50 and above	38.9	21.4	3.7	64.0	5.78	20.8
TOTAL	46.7	1.9	5.0	53.6	9.33	25.8
					1.1	2.7
					29.6	9.12
					36.7	1.6
					3.9	42.2
					..	9.24

A perusal of the data indicates that the participation rate in terms of percentage of mandays spent in labour force out of the total available mandays during the reference period of a week is almost similar in both the groups of households. However, the extent of unemployment is more in the non-cultivating wage earner households.

(ii) *Earnings :*

Average earnings per day of the workers in the two sets of the households differed only slightly. It was Rs. 2.28 for males, 1.81 for females and 2.13 for persons in the small cultivators households and Rs. 2.30, 1.89 and 2.16 for their counterparts in the non-cultivating wage earner households.

(iii) *Possibility of supplementing income :*

59.4 per cent of small cultivator households and 47.0 per cent of non-cultivating wage earner households indicated non-possibility of supplementing their income. Out of the remaining households majority preferred taking up dairying 28 per cent of the farmer group of household and 46 per cent of the latter needed financial help for doing so. Most of them required Rs. 1,000 or above. Roughly 10 per cent and 14 per cent households respectively of the two groups were willing to take up non-agricultural activities provided finance was made available. More than 80 per cent of such households desired to have Rs. 1,000 and above.

(iv) Percentage of households having members willing to take up regular full-time wage employment in the two groups of households and the location preference for work is indicated in Table-17.

TABLE-17

*Percentage distribution of households willing to take up regular full-time wage employment by location reference and other households*

Household Group	Within Village	Out-side the Village		Total	Not Willing to take up Full-time Employment	Total
		Guaranteed Regular Employment	Without Guaranteed Employment			
1. Small cultivator Households	33.7	30.2	4.3	68.2	31.8	100.0
2. Non-cultivating wage earner households	36.3	26.1	3.0	65.4	34.4	100.0

(v) Estimated number of persons who opted to take up regular full time employment was 2,59,500 males and 20,000 females in the small cultivator households and 6,15,600 men and 72,900 women in the non-cultivating wage earner households. The distribution of these persons by age, sex and qualifications is given in the Table-18.

TABLE-18

*Percentage distribution of persons willing to take employment outside village by age, sex and educational standard*

Educational Standard	0-9 Years		10-14		15-44		45-59		60 & above		Total	
	M	F	M	F	M	F	M	F	M	F	M	F
<i>Small Cultivators</i>												
1. Illiterate	..	75.00	00.00	75.16	94.74	93.75	00.00	..	..	70.30	95.00	
2. Literate but below Primary	..	20.00	..	9.85	2.63	6.25	..	..	..	10.02	2.50	
3. Primary	..	5.00	..	7.06	2.63	..	..	..	..	6.55	2.50	
4. Middle	..	..	..	..	5.57	..	..	..	..	..	5.01	..
5. Secondary	..	..	..	..	2.36	..	..	..	..	..	2.12	..
6. Above Secondary	..	..	..	..	..	..	..	..	..	..	..	..
7. Total percentage of persons by age group	..	3.85	2.50	89.98	95.00	6.17	2.50	..	..	100.00	100.00	
<i>Non-Cultivating Wage Earnings</i>												
1. Illiterate	..	69.23	100.00	82.62	95.45	90.24	100.00	..	..	83.11	96.30	
2. Literate but below primary	..	30.77	..	0.58	..	7.32	..	..	..	10.75	..	
3. Primary	..	..	..	2.77	..	2.44	..	..	..	..	2.63	..
4. Middle	..	..	..	..	2.01	4.55	..	..	..	..	1.76	3.70
5. Secondary	..	..	..	..	2.02	..	..	..	..	..	1.75	..
6. Above Secondary	..	..	..	..	..	..	..	..	..	..	..	..
7. Total	..	2.85	7.40	87.06	81.48	8.99	11.11	1.10	..	100.00	100.00	

(vi) Among those belonging to small cultivator households, 62 per cent were willing to take up employment on public works. They consisted of 90.2 per cent men and 9.8 per cent women.

Among those belonging to the other group of households 54 per cent opted for employment on public works and they comprised of 88 per cent men and 12 per cent women.

(vii) Among the persons willing to take up employment outside their villages, the majority was of males. In the small cultivator household group the percentage of females was about 1.0. The female labour willing to work outside the village in this group was illiterate and 87% of them were in the age group of 15 to 44. The rest were in the next upper age group 45 to 59. All of the females opted for employment on public works. The percentage distribution of male workers by age group and educational standard is given in Table-19.

TABLE I—9

*Percentage distribution of persons preferring jobs other than employment on public works*

Type of job	Persons belonging to Small Cultivator Households	Persons belonging to Non-Cultivating Wage earner Households
1. Clerical . . . .	68.59	58.50
2. Non-clerical non-manual . . . .	8.90	14.50
3. Manual skilled . . . .	1.57	0.50
4. Unskilled . . . .	20.94	26.50
<b>TOTAL</b>	<b>100.00</b>	<b>100.00</b>

Majority of them expected an annual salary/wage of Rs. 1,201 and above.

### SUMMARY

The non-availability of accurate statistical data on employment and unemployment stands in the way of making any assessment. The available data are uncom-

parable due to difference in concepts, reference periods and present a biased picture. However, the latest data are given in the Table-20.

TABLE-20  
*Data regarding unemployment at a glance*

Survey	The Rate of Unemployment in the Population			The Rate of Unemployment in the Labour Force		
	R	U	Total	R	U	Total
1971 Census (for other non-workers)	0.61	1.79	0.72	1.84	5.75	2.21
1961 Census	0.10	0.78	0.16	0.24	2.31	0.38
21st Round of NSS (1966-67)	N.A.	0.40	N.A.	N.A.	1.34	—
19th Round of NSS (1964-65)	1.88	N.A.	N.A.	5.58	N.A.	N.A.
25th Round of NSS (1970-71)						
(i) Small cultivator households.	2.8	N.A.	N.A.	6.59	N.A.	N.A.
(ii) Non-cultivating wage earner households	3.9	N.A.	N.A.	9.24	N.A.	N.A.

### GUJARAT

According to 1971 Census, the population of the State was 26.69 million — 13.79 million males and 12.90 millions females and the density of the population was 136 persons per sq. km. as against the average density of 182 for the country.

During 1961 Census detailed information regarding employment status of persons by level of education was collected and analysed. The relevant figures so far as they relate to All-India and to the State of Gujarat are given in Table-1.

TABLE-I

*Urban and rural population classified as workers and unemployed persons (1961)*

(In lakhs)

Level of Education	All India						Gujarat					
	Total Population		Cultivators		Agri. Labourers		Total Population		Cultivators		Agri. Labourers	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
<i>Urban</i>												
Total	427.9	361.5	12.4	4.8	4.9	4.2	306.9	31.1	7.3	28.0	25.1	0.8
1. Illiterates	181.9	236.7	6.8	4.4	3.8	4.0	68.4	24.0	1.5	0.1	11.3	15.9
2. Literate but below Matric	199.3	114.2	5.2	0.4	1.1	0.2	106.1	4.7	4.1	0.2	14.7	8.8
3. Matric or H.S. & Secondary	34.5	8.3	0.4	..	..	..	22.9	1.4	1.4	0.2	1.6	0.3
4. Diploma not equ. to Degree	2.6	0.6	..	..	..	..	4.8	0.2	0.1	..	..	..
5. Degree other than Tech.	7.6	1.3	..	..	..	..	6.0	0.4	0.2	0.1	..	..
6. Degree (Tech.)	2.0	0.4	..	..	..	..	1.7	0.3	..	0.2	..	..
<i>Rural</i>												
1. Total	1833.6	1766.4	652.2	326.7	168.3	137.7	247.1	90.5	5.1	0.6	78.3	74.9
2. Illiterate	1300.2	1615.4	450.6	313.6	145.4	134.6	138.5	82.6	1.1	0.2	51.3	65.0
3. Literate but below Matric	510.5	148.8	197.3	13.1	24.9	3.1	97.0	7.4	2.7	0.1	26.5	9.8
4. Matriculation & above	22.9	2.2	4.3	..	..	..	11.6	0.5	1.3	0.2	0.5	..

\* Include (i) Persons seeking employment for the first time.

(ii) Persons employed before but now out of employment and seeking work.

## 2. Study of Utilisation pattern of Graduates

In pursuance of the meeting of the manpower officers of the States held at New Delhi in 1965, the Bureau of Economics and Statistics, Government of Gujarat undertook a study of the utilisation pattern of graduates in 1966. The salient features of the study and its findings are indicated below :

### **Object and Scope of the Survey :**

The primary object of the study was to examine the pattern of graduates who obtained their graduation or post-graduation or technical diploma in 1961-63. The inter-alia included :

The post academic carrier of graduates, relationship between their qualifications and jobs they accepted or had to accept, their earnings, their mobility, their attitude towards the job they hold and the extent of unemployment if any among the graduates.

### **The Sample :**

In all 1961 graduates out of a total of 7,409 in 1961 and 2,150 out of 10,097 in 1963 were included in the sample.

### **Concept and definitions :**

The concepts and definitions adopted in the study were as follows :

#### *Graduate :*

The term "graduate" refers to all the students who obtained any post-graduate, graduate degree and diploma.

#### *Employment :*

The term "employed" included only those who were holding full-time job on the date of reporting. Thus, all the graduates who reported themselves either students or as full-time employed are taken as employed.

#### *Unemployment :*

All the informants who declared themselves as part-time employed and unemployed but available for work on the date of reporting are treated as unemployed.

#### *Family Enterprise :*

A Family Enterprise is conducted mainly by the members of the family and in which the members of the family work without receiving wages in cash or kind. However, members of the household who help solely in household duties do not fall in this category. They are treated as persons not available for work.

#### *Response :*

Out of selected students, only 481 i.e., 30.81% from 1961 batch and 747 i.e., 34.74% from the 1963 batch responded. Though the overall and faculty-wise percentages of response differ widely for 1961 and 1963 batches, the percentage of reporting students to the total students covered by survey were of the order of 6.49 for 1961 and 7.40 for 1963.

### **Limitations :**

In view of the poor response, faulty and incomplete findings of the questioning etc., the findings of the study particularly in regard to the different aspects of the pattern of graduates employed and unemployed should, therefore, be interpreted cautiously.

### **The main findings :**

The study showed that of the total graduates of the 1961 batch, 6.03% were full time students and full time employed 82.54% were employed, 6 per cent were pursuing further studies, less than 4 per cent were unemployed and less than 1 per cent were not seeking a job.

(ii) The study revealed that about 60 per cent of the graduates of both the batches obtained their employment immediately after passing their last qualifying examination. 29 to 30 per cent were able to obtain their first employment within one year after passing their last qualifying examination. Another 4 to 5 per cent waited for more than one year but less than 3 years for getting the first employment.

(iii) The unemployment was reported among the B.A., B.Sc., B. Com., M.A., M.Com. degree holders. In addition 9 per cent of the technical diploma holders of the 1963 batch were reported as unemployed.

### **3. Educated Unemployed :**

In August, 1970 the Government of Gujarat undertook a pilot survey to find out the unemployment position both in the urban and rural areas of Broach District. The object of the pilot survey was to find the position of registrants with Employment Exchanges i.e., no. registered but employed, no. registered but studying, no. of unemployed and not registered with the Employment Exchanges. The survey was confined to the educated persons that is, persons who had passed SSC or equivalent examination or had completed a certificate or diploma course in some trade or vocation.

### **Results :**

At the end of the month of July, 1971 there were in all 6,685 persons on the live register of the Employment Exchanges. Of these about 21 percent of applicants were from Scheduled Tribes and Scheduled Castes. Further the Employment Exchange Statistics also revealed that about 43 per cent of the educated applicants come from rural area as against 57 per cent from the urban area.

### **Rural Areas :**

On the basis of household survey in Broach district, it was observed that the proportion of educated persons to the total number of persons in the rural area of the district was about 1 per cent. Of the educated persons, 68 per cent who were not registered with the employment exchange were found to be employed or studying and not seeking work, 13 per cent who were not registered with the employment exchange were found to be seeking work and the remaining 19 per cent were registered with the employment exchange.

Of the persons registered with Employment Exchange, 42 per cent were 'neither studying nor employed'. The percentage of persons 'employed' or 'employed' and studying further among the total registered persons was 40, whereas the percentage of persons who were only 'studying' among the total registered was 18.

Of the total employed persons registered with the employment exchange, 50 per cent were self employed.

Of the total registered persons 80 per cent did not possess any skill and the remaining 20 per cent had acquired some vocational or trade skill. The general educational levels of these persons showed that 80 per cent had passed S.S.C. level examination, 4 per cent had passed I.T.I. examination and 16 per cent were graduates and above in engineering and technology and other subjects.

Out of the registered 'unemployed' persons, 76 per cent did not posses skill and the remaining 24 per cent possessed some vocational or trade skill. It is significant that though 16 per cent of the persons registered with employment exchange were graduates and above none of them was unemployed.

It was also observed that 77 per cent of the persons not registered with employment exchanges but seeking work had no skill. The remaining 23 per cent of persons possessed some vocational or trade skill. It was also seen that 94 per cent of the persons not registered with the employment exchanges but seeking work had passed either I.T.I. examination or S.S.C. level examination and only about 6 per cent were graduates and above.

#### Urban area :

The survey revealed that the number of educated persons to the total number of persons in the urban areas was 6 percent. Of the educated persons, 76 percent who were not registered with the employment exchange were found to be employed or studying and not seeking work and the remaining 15 percent were registered with the employment exchanges and the remaining 9% were not registered but were seeking employment.

#### Urban labour force in Gujarat :

The Bureau of Economics and statistics on the basis of the data collected about the urban labour force in 1960-61 and 1967-68 rounds of the National Sample Survey attempted a study of the employment pattern and changes therein through the intervening period. The results of the 1960-61 survey were based on combined estimates of the Central and States sample while 1967-68 results were based on the State Sample only.

The percentage distribution of urban population in the State in 1960-61 and 1967-68 was as under :

Age Group	1960-61	1967-68
0—14 . . . . . . . .	41.67 (40.80)	41.000
15—24 . . . . . . . .	18.20 (18.63)	19.65
25—39 . . . . . . . .	20.83 (21.53)	20.45
40—59 . . . . . . . .	14.50 (14.48)	14.07
60 and above . . . . . . . .	4.80 (4.56)	4.83

Note : Figures in brackets indicate 1961 Census percentages.

### Employment :

The proposition of persons in the labour force to total population was 30.95% in 1960-61 and 28.73% in 1967-68 i.e., 16.45 lakhs in 1961 and 18.46 lakhs in 1968. Of the persons in the labour force, over 98% were employed i.e., the employed population was about 16.14 lakhs in 1961 and 18.13 lakhs in 1968. In other words during the seven year period 1961-68. Of the net addition of 2.01 lakhs persons to the urban labour force, the urban economy could provide employment to 1.99 lakhs persons i.e., 98% of the net addition.

The sex-wise distribution of the employed persons in 1961 and 1968 was as given in table below :

	(in lakhs)	
	1961	1968
Male . . . . .	13.17	14.87
Female . . . . .	2.97	3.26
TOTAL . . . . .	16.14	18.13

### Unemployed :

The proportion of unemployed persons in the labour force was 1.87 per cent in 1961 and 1.81 in 1968. The change in the educational characteristics of unemployed persons over the seven year period was as given below :

Educational Standard	(Percentages)	
	1961	1968
Illiterate . . . . .	32.95	9.82
Literate but below primary . . . . .	48.04	65.67
Primary but below secondary . . . . .	17.37	17.19
Secondary . . . . .	1.64	6.32
Graduate & above . . . . .	100.00	100.00

There has been a steep drop in the proportion of illiterates among the total unemployed which is largely set off by the increase in proportion of 'literates but below secondary'. The proportion of persons having passed S.S.C. and similar examinations but who were not graduate has remained stationary but there has been a sharp increase in the proportion of persons with graduate and higher qualifications seeking jobs.

Though the information on the number of days worked was not collected during the 1967-68 round of NSS the intergrated household scheduled canvassed during 1967-68 do provide data on labour time-deposition. The proportion of employed persons at work by number of days worked as obtained for 1960-61 and estimated for 1967-68 is given in the table below :

No. of Days Worked in the Reference Week	1960-61	1967-68
Upto 3 days . . . . .	4.74	1.68
Upto 5 days . . . . .	10.35	8.15
More than 5 days . . . . .	87.30	91.85
Not recorded . . . . .	2.34	-

The data collected during 18th, 19th and 20th rounds of the National Sample Survey pertaining to the state sample were pooled to increase the size of the sample as well as enhance the precision of the estimates. The number of households selected during 18th, 19th and 20th rounds were 1,152, 1,153 and 1,152 respectively. Thus the estimates obtained are based on 3,457 households. The pooled analysis of data and results derived there from are indicated below :

(a) Age composition :

The percentage distribution of (a) population and (b) Labour force by age and sex was as given in table below :

*Percentage distribution of (a) population and (b) labour force by age and sex*

(a) Population

(d) Labour Force

(1963-64, 1964-65 and 1965-66)

Age Group	All Persons			Age Group	All Persons		
	Male	Female	Male		Female	All	
0—14 . . . . .	42.20	40.80	41.53	0—14	1.18	1.33	1.31
15—24 . . . . .	18.97	18.30	18.65	15—24	22.06	26.25	22.54
25—39 . . . . .	20.52	21.42	20.95	25—39	43.56	38.35	42.96
40—59 . . . . .	14.89	14.30	14.61	40—59	30.27	30.18	30.26
60 & above . . . . .	3.41	5.18	4.25	60 & above	2.93	2.89	2.93
N.R. . . . .	0.01	-	6.01	N.R.	-	-	-
<b>TOTAL . . . . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>TOTAL . . . . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

It is observed that in the labour force, amongst males 1.18 per cent were in the age group 0 to 14 years and 2.93 per cent were of 60 years and above, amongst females 2.33 per cent were in the age group 0-14 years and 2.89 per cent were in the age group of 60 years and above. Thus 4.11 per cent of the males and 5.22 per cent of the females in the labour force came from age groups not supposed to contribute to the labour force of the State.

**(b) Labour force:**

The analysis further revealed that the case of males 53.9 per cent were outside the labour force, 45.5 per cent were employed and 0.6 per cent were unemployed. Similarly in the case of females 93.3 per cent were outside the labour force, 6.5 per cent were employed and 0.2 per cent were unemployed. The relevant details are given in the table below :

*Percentage distribution of population by sex and labour force status as*

*(i) employed : (a) at work. (b) not at work. (ii) unemployed : (a) new entrant (b) others. (iii) out of labour force (1963-64, 1964-65 and 1965-66)*

Labour Force		Male	Female	All Persons
(i) Employed . . . . .		45.16	6.50	25.86
(a) at work . . . . .		0.36	0.02	0.20
Total employed . . . . .	नवागत संघर्ष	45.52	6.52	27.05
(ii) Unemployed . . . . .		0.28	0.09	0.19
(a) new entrance . . . . .		0.26	0.07	0.16
Total unemployed . . . . .		0.54	0.16	0.35
(iii) Not in labour force . . . . .		53.94	93.32	72.59
<b>TOTAL . . . . .</b>		<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

## (c) The education standard :

The distribution of (a) population and (b) Labour force by educational standard and sex are given in the table below :

*Percentage distribution of (a) population (b) labour force by educational standard and sex*

(1963-64, 1964-65 and 1965-66)

Educational standard	(a) Population			(b) Labour Force		
	Male	Female	All Persons	Male	Female	All Persons
Illiterate .	35.05	57.27	45.57	23.72	70.74	29.15
Literate but below graduate .	62.65	42.19	52.96	72.65	26.86	67.36
Graduate .	2.30	0.54	1.47	3.63	2.40	3.49
N.R. .	—	—	—	—	—	—
<b>TOTAL .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

The above labour force analysis shows that among males 23.7 per cent were illiterates, 72.7 per cent were literates but with qualifications less than graduate and 3.6 per cent were with graduate or higher qualifications. In the case of females as many as 70.7 per cent were illiterates, 26.9 per cent were literates but with qualifications less than graduation and 3.4 per cent were graduates or with higher qualifications.

## (d) unemployment according to the educational standards :

A further study of the unemployment according to educational standards showed that 2.83 per cent of the males with graduation or higher qualifications were unemployed, 10.36 per cent in the group with qualifications secondary but below graduation were unemployed, 7.00 per cent of literates but with qualifications less than secondary were unemployed and 4.67 per cent of the illiterates were unemployed. In the case of females percentage unemployment amongst females with qualifications graduation or higher was 24.14. It was 22.27 for literates but with qualifications less than secondary and 9.56 per cent for illiterates

(e) Registered with employment exchanges :

The percentage distribution of unemployed persons according to whether registered at Employment Exchanges, sex and educational standard was as given in table below :

*Percentage distribution of unemployed persons according to whether registered at employment exchanges, sex and educational standard (1963-64, 1964-65 and 1965-66)*

Registered and Un-registered Educational Code	Registered			Unregistered			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
1. Graduate and above	100.00	100.00	100.00	..	..	..	100.00	100.00	100.00
2. Technical education	..	..	..	..	..	..	..	..	..
3. Secondary	72.73	..	72.73	27.27	..	27.27	100.00	..	100.00
4. Literate but below Secondary	29.33	57.45	33.14	70.67	42.55	66.85	100.00	100.00	100.00
5. Illiterate	10.53	..	5.84	89.47	100.00	94.16	100.00	100.00	100.00
6. Not recorded	..	..	..	..	..	..	..	..	..
<b>TOTAL</b>	<b>32.49</b>	<b>29.57</b>	<b>31.88</b>	<b>67.51</b>	<b>70.43</b>	<b>68.12</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

The above analysis showed that 31.9 per cent of the unemployed persons were registered at the Employment Exchanges. A study of their registration showed that all the unemployed persons with qualifications graduation or higher were registered. For persons with qualifications of secondary standard but below graduation, the percentage was 72.7 for secondary, 33.1 per cent for literate but below secondary and 5.84 per cent for illiterate.

The study further revealed that 0.8 per cent of the total employed persons were registered at the Employment Exchanges for better prospects. This percentage was 3.95 for persons with graduate or higher qualifications. This result is based on the information collected during 1963-64 and 1964-65.

### 25th Round of the National Sample Survey of the Rural area :

In the 25th round of the National Sample Survey, a study of the economic conditions of the weaker section of the rural population was undertaken. The weaker section includes small cultivators households and non-cultivator wage earner households.

Collection of data under the round canvassed in the middle of July, 1970 and continued up to the end of June, 1971. The results so far as they relate to the employment and unemployment situation among the small cultivator household in rural areas are presented below :

The survey revealed that approximately 2 per cent of the small cultivators were unemployed that is, seeking and/or available for work. It was 1.8 per cent in the age group 10-14, 3.2 per cent in 15-44, and 4.3 per cent in 45-59. There was not a single person in the age group 0-9 and 60 and above who was seeking and/or available for work. The corresponding percentages of unemployed among the males and females in different age groups were 2.8 per cent and 0.9 per cent in the age group 10-14, 3.9 per cent and 2.5 per cent in the age group 15-44 and 6.1 per cent and 2.3 per cent in age group of 45-59. The absolute figures of the estimated number of mandays spent per week are given below :

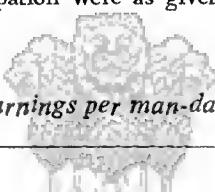
*No. of man-days by age and sex*

(figures in 00)

Age Group In Years						
0—9	10—14	15—44	45—59	60 & above	Total	1
2	3	4	5	6	7	
<i>Males</i>						
Seeking and/or available for work	—	92	401	146	—	639
TOTAL	9,714	3,265	10,256	1,375	918	25,528
<i>Females</i>						
Seeking and/or available for work	—	30	229	52	—	311
TOTAL	7,296	3,181	9,116	2,172	1,050	22,815

	1	2	3	4	5	6	7
	<i>Persons</i>						
Seeking and/or available for work	—	122	630	198	—	—	950
TOTAL .	16,010	6,446	19,372	4,547	1,968	48,343	

As regards the earnings per man-day, it was observed that males in respect of their working either in other farms for salary or wages or in non-farm occupation as non-self-employed earned more than the females in the corresponding age groups. There was, however, no such trend in respect of the earnings derived from the farm or non-farm occupation. The average rate of earnings per man-day by employees of different sex, age group engaged in agriculture and other occupation were as given in the table below :

  
*For all non-self-employed*  
*Average earnings per man-day in rupees*

Age Group (in years)		Male	Female	Persons
0-9 . . . . .	—	—	—	—
10-14 . . . . .	1.25	1.22	1.23	
15-44 . . . . .	1.94	1.49	1.79	
45-59 . . . . .	2.06	1.19	1.73	
60 & above . . . . .	1.56	—	1.56	
TOTAL .	1.91	1.41	1.73	

In this round data on employment and unemployment in respect of non-cultivating wage earner households were also collected. The analysis of data revealed that approximately 3.2 per cent of the non-cultivation wage earners were unemployed that is, seeking and/or available for work. It was 3.4 per cent in the age group of 10-14, 5.3 per cent in 15-44, 4.9 per cent in 45-59 and 5.0 per cent in 60 and above. The corresponding percentages of unemployed among males and females in different age groups were 3.4 and 1.9 in the age group 10-14, 6.3 and 4.0 in 15-44, 4.0 and 5.6 in 45-59 and 102 and 0.0 in the age group 60 and above.

The absolute figures of estimated number of mandays spent per week are given below :

*No. of man-days by age and sex*

	Age Group in Years					Total
	0-9	10-14	15-44	45-59	60 & above	
<b>MALES</b>						
Seeking and/or available for work	—	238	1,356	224	207	2,025
<b>TOTAL</b>	<b>17,057</b>	<b>7,872</b>	<b>21,241</b>	<b>5,664</b>	<b>2,058</b>	<b>53,892</b>
<b>FEMALES</b>						
Seeking and/or available for work	—	256	776	388	—	1,420
<b>TOTAL</b>	<b>15,050</b>	<b>6,733</b>	<b>19,348</b>	<b>6,946</b>	<b>2,101</b>	<b>50,178</b>
<b>PERSONS</b>						
Seeking and/or available for work	—	494	2,132	612	207	3,445
<b>TOTAL</b>	<b>32,107</b>	<b>15,605</b>	<b>40,589</b>	<b>12,610</b>	<b>4,159</b>	<b>1,04,070</b>

As regards the earnings per man-day it was observed that males irrespective of their working either in other farm for salary or wages or in non-farm occupations as non-self-employed earned more than the females in the corresponding age group. There was however no such trend in respect of earnings derived from the farm or non-farm occupation. The average rate of earnings per man-day by employees of different sex, age groups engaged in agriculture and other occupations were :

*For all non-self-employed*  
*An earning per man-day in rupees*

Age Group	Male	Female	Persons
0-9 . . . . . . . .	1.00	—	1.00
10-14 . . . . . . . .	1.72	1.73	1.72
15-44 . . . . . . . .	2.42	1.71	2.16
45-59 . . . . . . . .	2.72	1.69	2.02
60 & above . . . . . . . .	1.93	1.00	1.67
<b>TOTAL</b> . . . . . . . .	<b>2.32</b>	<b>1.70</b>	<b>2.08</b>

**HARYANA**

The State of Haryana was carved out of the Punjab State in November, 1966, with the districts of Hissar, Rohtak, Gurgaon, Karnal, Ambala, Jind and Mahendragarh as its components.

According to 1971 Census, Haryana had a population of 99,71,165 (53.33 per cent males and 46.67 per cent females). 82.12 per cent of the persons lived in the rural areas and 17.78 per cent in the urban areas of the State.

#### Labour force :

In the 1971 Census the population was primarily classified as 'workers' and 'non-workers' according to their major time-disposition, activity being some gainful work or non-gainful engagement. However, from these in the category 'non-workers' information was sought about the subsidiary gainful activity, if any. Persons who could not be categorised according to the specific sub-categories of non-workers and who were reported to be seeking job had been put in the residual sub-category "others" of the non-workers. It is presumed that this category will mostly consist of the unemployed persons. On the basis of the data thus emanating the labour force as per 1971 Census has been computed and indicated in Table 1.

TABLE-1  
*Labour force as per 1971 census*

Area	Sex	Workers	Non-	Total	Others	Total	Per-
			Workers having Subsi- diary Acti- vity	Number of Persons with Gain- ful Work	among Non- Workers	Persons and Seek- ing Work	centage of Per- sons to Labour Force
1	2	3	4	5	6	7	8
State .	Male .	24,95,498	500	24,95,998	49,200	25,45,198	47.87
	Female .	1,47,618	2,400	1,50,018	10,200	1,60,218	3.44
	Persons .	26,43,116	2,900	26,46,016	59,400	27,05,416	27.13
Rural .	Male .	20,52,852	100	20,52,952	37,100	20,90,052	47.94
	Female .	1,21,788	1,700	1,23,488	7,600	1,31,088	3.42
	Persons .	21,74,640	1,800	21,76,440	44,700	22,21,140	27.09
Urban .	Male .	4,42,646	400	4,43,046	12,100	4,55,146	47.55
	Female .	25,830	700	26,530	2,600	29,130	3.57
	Persons .	4,68,476	1,100	4,69,576	14,700	4,84,276	27.31

Source : Provisional Population Tables—Paper-I of 1971 Supplement, 'B' Series  
Data obtained from the Registrar General.

The data on labour force as per 1961 Census are given in Table 2.

TABLE-2  
*Percentage of population to labour force as per 1961 census*

Area			Persons	Male	Female
State .	.	.	38.14	52.56	38.14
Rural .	.	.	38.31	53.28	21.19
Urban .	.	.	29.55	48.49	5.75

The data in respect of participation rates for rural and urban areas on the basis of the National Sample Survey reports are given in Table 3.

TABLE-3

*Percentage of population in labour force in Haryana*

Survey Particulars	Rural			Urban		
	Persons	Male	Female	Persons	Male	Female
19th Round of NSS (1964-65)	39.75	48.53	30.10	24.94	40.57	6.21
20th Round of NSS (1965-66)	N.A.	N.A.	N.A.	28.30	47.76	5.37
21st Round of NSS (1966-67) Central Samples . . .	N.A.	N.A.	N.A.	26.45	43.83	5.65
21st Round of NSS Posted Results of State & Central Samples . . .	N.A.	N.A.	N.A.	25.47	44.11	4.79
Survey conducted by the Bureau of Statistics, Haryana (1959-70) . . .	31.48	43.00	18.37	N.A.	N.A.	N.A.

On the basis of 1961 Census, the Economic and Statistical Organisation, Planning Department, Government of Haryana has projected the working force for 1971 and 1974 as given in Table 4.



TABLE-4

*Projected working force in 1971 and 1974 in Haryana*

Particulars	1971		1974	
	(in lakh)	Percentage	(in lakh)	Percentage
1	2	3	4	5
<b>Total Population</b>				
Males . . . . .	54.97	53.36	59.82	53.36
Females . . . . .	48.05	46.64	52.29	46.64
<b>TOTAL</b>	<b>103.02</b>	<b>100.00</b>	<b>112.11</b>	<b>100.00</b>

	1	2	3	4	5
Population in age group 15-59 and their percentages to the total population . . . . .					
Males . . . . .		27.70	50.39	29.43	49.20
Females . . . . .		23.90	49.74	25.73	49.21
TOTAL . .	51.60	50.09	55.16	49.20	

Labour force (Working population in the ages 15-59) and their per- centages to the population in the age group 15-59							
Males	.	.	.	24.99	90.22	26.55	90.22
Females	.	.	.	8.84	36.99	9.52	37.00
	TOTAL	.	33.83	65.56	36.07	65.39	

For urban and rural areas separately such projections are not available. In the absence of adequate data such projection for rural areas is not feasible. In the urban areas, however, the labour force in 1971 appears to be near about 28 per cent, keeping in view the number of persons classified as 'Worker' by 1971 census and the possible omission of workers by secondary activity alone and unemployed persons.

### Some characteristics of the labour force:

### *Age distribution of persons in labour force*

The available data of 1961 census are in respect of the working force only and are given in Table 5.

TABLE-5

*Percentage distribution of working population of Haryana by broad age groups—1961 census*

The data reveal that the majority of the labour force belonged to the age groups used in two surveys differ, it is not possible to determine this factor in the age group 15-59.

For the labour force the data are available from the 21st Round of National Sample Survey (1966-67) in respect of urban areas only. They are reproduced in the Table 6.

TABLE-6

*Percentage distribution of persons in labour force in urban area by sex and broad age group—21st round of NSS (1966-67)*

Age Group	Persons	Male	Female
0-9 . . . . . . . . . .	—	—	—
10-14 . . . . . . . . . .	1·37	0·97	5·40
15-19 . . . . . . . . . .	5·54	5·47	6·30
20-24 . . . . . . . . . .	13·09	12·87	15·32
25-29 . . . . . . . . . .	16·31	16·40	15·32
30-39 . . . . . . . . . .	27·47	27·43	27·93
40-49 . . . . . . . . . .	19·12	19·31	17·12
50-59 . . . . . . . . . .	10·76	10·93	9·01
60 & above . . . . . . . . . .	6·35	6·62	3·60
<b>TOTAL . . . . . . . . . .</b>	<b>100·00</b>	<b>100·00</b>	<b>100·00</b>

(ii) The Labour Force participation rates by age group are further revealing. For rural areas; the participation rate is available only in respect of working population. It is not available for unemployed for the part of Punjab now constituting Haryana State. Hence in Table No. 7 the age-wise participation rate for the workers as per 1961 Census is being given and in Table No. 8 for urban areas the participation rate based on the results of the 21st Round of NSS (States and Central Samples pooled) is being given.

TABLE-7

*Age-sex specific work participation per hundred persons as per 1961 census*

Age Group years	Total			Rural			Urban		
	Per- sons	Male	Fe- male	Per- sons	Male	Fe- male	Per- sons	Male	Fe- male
0-14 . . . . . . . . . .	6·8	7·7	5·8	7·8	8·7	6·9	1·5	2·1	0·7
15-34 . . . . . . . . . .	62·7	85·8	37·3	66·9	88·7	43·5	45·0	78·5	8·7
35-59 . . . . . . . . . .	69·9	96·7	36·4	72·2	97·0	41·8	58·9	95·1	11·8
60 & above . . . . . . . . . .	48·2	71·3	13·7	50·4	73·2	15·3	36·8	60·5	6·7
All ages . . . . . . . . . .	37·9	52·2	21·5	39·8	53·0	24·7	28·9	48·5	5·7

TABLE-8  
*Age-sex specific participation rate per 100 persons in the urban areas of Haryana State  
(21st Round of NSS-1966-67)*

Age Group	Persons			Male			Female		
	Employed (Working population)	Unemploy- ed	Labour Force	Employed	Unemploy- ed	Labour Force	Employed	Unemploy- ed	Labour Force
0—9 .	..	..	..	..	..	..	..	..	..
10—13 .	0·73	..	0·73	0·69	..	0·69	0·76	..	0·76
0—13 .	0·20	..	0·20	0·19	..	0·19	0·21	..	0·21
14 .	9·76	0·81	10·57	15·52	..	15·52	4·61	1·54	6·15
15—19 .	13·53	1·77	15·30	23·91	3·04	26·95	2·71	0·45	3·16
20—24 .	40·05	1·28	41·35	72·31	2·56	74·87	8·12	..	8·12
25—29 .	55·61	0·27	55·88	94·81	0·51	95·32	10·59	..	10·59
30—39 .	59·10	0·17	59·27	98·72	0·32	99·04	11·79	..	11·79
40—49 .	56·26	..	56·26	99·10	..	99·10	9·41	..	9·41
50—59 .	48·53	0·76	49·27	77·74	1·31	81·66	8·40	..	8·40
14—59 .	43·95	0·60	44·55	76·21	1·17	77·38	8·33	0·16	8·49
60 and above .	29·37	..	29·37	..	..	29·37	3·54	..	3·54
All ages .	25·10	0·37	25·47	43·48	0·63	44·11	4·70	..	4·70

From the Table No. 8 it will be seen that on the basis of the Sample Survey with reference period of one week preceding the date of enquiry the percentage of persons in the working population was found to be 25.47 as against 28.9% found by the census 1961 wherein the reference period resulted in more persons being included into the 'working force'. The figures in respect of male and female workers are also correspondingly smaller in the Sample Survey. Another factor contributing to the smaller participation rate may be the expanding education facilities which lead to less participation in the lower age groups. As the age groups used in two surveys differ, it is not possible to determine this factor precisely.

The above tables indicate that the participation rate is highest in the age group 35-59 both among women as well as men. In urban and rural areas there is vast difference in the participation rates among the children of both sex below 14 and females above the age of 60. Their participation is higher in rural areas mainly due to the agrarian economy predominating in the region. In the urban areas the participation of women of other age groups too, is much lower than that in rural areas. The results of the NSS 21st round indicate that age 14 is crucial for entry into the labour force, as in the age group 0-13 the participation rate is negligible while at the age of 14 it is 15.5% for males and 4.6% for females. Such information would have been useful for rural areas also.

(iii) Distribution of persons in labour force by educational standard is available for urban areas only from the 21st Round of Survey. Due to the reorganization of districts to form Haryana after the 1961 Census, it has not been feasible to compute this information for the labour force of the newly created State. The percentage distribution of urban labour force by educational level is given in Table 9.

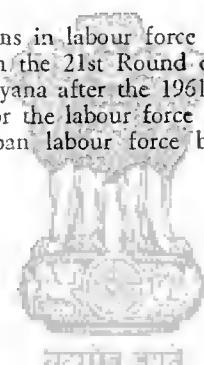


TABLE-9

*Percentage: age-sex specific distribution of labour force by educational standard*

Age Group	Persons				Male				Female			
	Ulti- rate but below Primary	Pri- mary but below Primary	Secon- dary but below Primary	Gradu- ate and above	Pri- mary but below Primary	Secon- dary but below Primary	Gradu- ate and above	Pri- mary but below Primary	Ulti- rate but below Primary	Secon- dary but below Primary	Pri- mary but below Primary	Gradu- ate and above
0-13	*	100.00	..	..	100.00	..	..	..	100.00	..	..	..
4	*	69.21	15.39	7.70	66.65	22.23	11.12	..	74.98	..	..	25.02 ..
5-19	*	40.88	11.60	31.88	15.94	41.94	12.90	32.26	12.90	28.56	..	28.57 42.87 ..
20-24	*	20.86	5.52	34.36	34.36	4.91	19.86	5.48	36.99	33.56	4.11	29.42 5.89 11.77 41.17 11.75
25-29	*	26.60	13.79	20.69	30.05	8.87	22.58	15.05	22.04	31.72	8.61	70.58 .. 5.89 11.77 11.76
30-39	*	36.84	14.04	29.82	12.87	6.43	33.76	14.15	32.16	13.18	6.75	67.75 12.90 6.45 9.67 3.23
40-49	*	36.56	22.27	31.51	7.98	1.68	32.42	22.83	34.25	8.67	1.83	84.21 15.79 .. .. ..
50-59	*	44.77	16.42	26.87	10.45	1.49	41.13	17.74	28.23	11.29	1.61	89.99 .. 10.01 .. .. ..
60 & above	*	34.25	14.63	28.74	17.73	4.65	31.22	15.33	30.84	17.97	4.64	64.76 7.62 7.62 15.24 4.76 .. .. ..
<b>Total</b>	.	35.42	15.42	27.79	16.79	4.58	32.36	16.23	29.80	17.02	4.59	66.67 7.21 7.21 14.41 4.50 .. .. ..

*Unemployment :*

As mentioned earlier the persons in the category "non-workers-others" are supposed to be unemployed. In the Table No. 10 the number and percentage of the persons of this category are being given.

TABLE-10

*Number and percentage of persons in the category "non-workers-others" as per 1971 census*

Particulars	All Areas	Rural	Urban
1. No. of "others" among non-workers			
(i) Persons . . . . .	59,400	44,700	14,700
(ii) Male . . . . .	49,200	37,100	12,100
(iii) Female . . . . .	10,200	7,600	2,600
2. Percentage of 'other non-workers'			
(i) to population . . . . .	0·60	0·55	0·83
(ii) to labour force . . . . .	2·80	2·01	3·04
(iii) of males among other non-workers . . . . .	82·82	33·00	82·31
(iv) of females among other non-workers . . . . .	17·18	17·00	17·69
(v) to male population . . . . .	0·93	0·85	1·26
(vi) to male labour force . . . . .	1·93	1·78	2·66
(vii) to female population . . . . .	0·22	0·20	0·32
(viii) to female labour force . . . . .	6·37	5·80	8·93

In the 1961 Census the persons seeking work were included in a specific category of unemployed. The relevant data are given in Table-11.

TABLE-11

*Extent of unemployment in Haryana as per 1961 census*

Particulars	All Areas	Rural	Urban
Percentage of Unemployed Persons :			
(i) to total population . . . . .	0·21	0·13	0·62
(ii) to total labour force . . . . .	0·56	3·21	2·10
(iii) of males among unemployed persons . . . . .	97·18	98·24	96·13
(iv) of females among unemployed persons . . . . .	2·82	1·76	3·87
(v) to total male population . . . . .	0·39	0·24	1·10
(vi) to male labour force . . . . .	0·74	0·45	2·21
(vii) to female population . . . . .	0·01	0·00	0·05
(viii) to female labour force . . . . .	0·06	0·02	0·91

The data on extent of unemployment in rural and urban areas of Haryana as per National Sample Survey Reports are given in the Table No. 12.

TABLE-12

*Extent of Unemployment in Rural and Urban areas of Haryana*

Survey	Percentage of Unemployed								
	To Total Popu- lation	To Total Labour Force	Males among Unemp- loyed Persons	Females among Unemp- loyed Persons	Males to Male Population	Males to Male Population	Fe- males to Female Population	Females to Female Population	
	1	2	3	4	5	6	7	8	9
<i>Rural</i>									
1961 Census . . .	0.13	3.21	98.24	1.76	0.24	0.45	0.00	0.02	
NSS 19th Round (1964-65) . . .	0.61	1.18	100.00	Nil	1.17	1.83	Nil	Nil	
Survey conducted by the Bureau of Economics & Statistics in 1970-71 . . .	0.66	2.10	81.60	18.40	1.01	2.35	0.25	1.41	
<i>Urban</i>									
1961 Census . . .	0.62	2.10	96.13	3.87	1.10	2.21	0.05	0.91	
NSS 19th Round (1964-65) . . .	0.20	1.24	Nil	100.00	Nil	Nil	0.56	3.22	
NSS 20th Round (1965-66) . . .	0.21	0.64	83.33	16.67	0.32	0.59	0.09	1.25	
NSS 21st Round (Pooled-State and Central Samples (1966-67) . . .	0.37	1.45	88.88	11.12	0.63	1.41	0.09	1.80	
NSS 21st Round (Central) (1966-67) . . .	0.34	1.30	85.00	15.00	0.55	1.23	0.09	1.33	

The NSS data are based on the reference period of one week. The current status alone was considered for determining the unemployment. Persons below the age of 14 of years and above the age of 59 years were not treated unemployed. Unemployment in the rank of men as well as women is very negligible in urban areas. It appears to be near about 5 to 6 per thousand males and only 1 per thousand females in urban areas. According to 21st round of NSS (1966-67) out of the total population of 12.45 lakhs, the number of unemployed was 0.06 lakhs (0.05) lakh men and 0.01 lakh women. In rural areas according to the survey conducted by the Economics & Statistical Organization, Haryana, during 1969-70, the number of unemployed persons was only 0.52 lakhs out of the estimated population of 79.9 lakhs and 24.9 lakhs of effective labour force.

From the data thrown by census 1961 the district-wise incidence of unemployment is available and is being set in the Table-13.

TABLE-13

*Extent and incidence of unemployment in the various districts of Haryana as per data from 1961 census*

Districts	Percentage of Unemployed Persons to Population			Incidence of Unemployment		
	Male	Female	Persons	Male	Female	Persons
<i>Rural</i>						
1. Hissar . . . . .	0·10	0·00	0·06	0·18	0·01	0·13
2. Rohtak . . . . .	0·39	0·01	0·21	0·80	0·01	0·51
3. Gurgaon . . . . .	0·30	—	0·16	0·58	—	0·39
4. Karnal . . . . .	0·16	0·01	0·09	0·30	0·11	0·27
5. Ambala . . . . .	0·34	0·00	0·18	0·63	0·04	0·59
6. Jind . . . . .	0·15	—	0·08	0·26	—	0·18
7. Mahendragarh . . . . .	0·21	—	0·11	0·42	—	0·27
<i>Urban</i>						
1. Hissar . . . . .	1·15	0·08	0·64	2·35	0·56	2·21
2. Rohtak . . . . .	0·96	0·04	0·53	2·11	0·65	1·96
3. Gurgaon . . . . .	1·56	0·05	0·85	3·16	0·84	2·96
4. Karnal . . . . .	0·69	0·39	0·38	1·43	0·54	1·33
5. Ambala . . . . .	1·27	0·12	0·77	2·36	3·10	2·40
6. Jind . . . . .	0·98	0·02	0·54	1·93	0·16	1·69
7. Mahendragarh . . . . .	0·68	0·00	0·36	1·37	0·04	1·18

V. Characteristics of unemployed persons :

In respect of rural areas the details regarding age-wise distribution of unemployed persons and intensity of unemployment by age-group are not available. However, their distribution by educational level as per survey conducted by the Bureau of Economics and Statistics is given in Table-14.

TABLE-14

*Percentage distribution of unemployed persons by educational level*

Educational Level	Percentage of Unemployed Persons		
	Male	Female	Total
1. Illiterate . . . . .	37·50	66·67	42·86
2. Literate but below primary . . . . .	3·75	5·56	4·08
3. Primary . . . . .	17·50	—	14·29
4. Middle . . . . .	11·25	11·11	11·22
5. Secondary . . . . .	27·50	16·66	25·51
6. Graduates & above . . . . .	2·50	—	2·04
TOTAL . . . . .	100·00	100·00	100·00

Source : Data provided by the Bureau of Economics & Statistics, Haryana.

The data of the table indicate that in the rural area of Haryana also unemployment has among its victims the educated persons—those who had passed the secondary examination. The percentage of such persons among the unemployed persons was as high as 27 and among males 30.

In respects of urban areas, the following details are available from the report on the 21st Round of National Sample Survey published by the Economic and Statistical Organisation, Planning Department, Government of Haryana.

(i) Out of the unemployed persons 44.43% (the highest) were in the age group 15-19 followed by 27.28% in the age group 20-24. The percentage distribution of unemployed persons by sex and age is given in Table No. 15. The survey considered persons in the age group 14-59 (both exclusive) only as unemployed.

TABLE-15

*Percentage distribution of unemployed persons by sex and age  
(Haryana Urban)*

Age Group Years	Persons	Male	Female
14 . . . . .	5·56	—	5·56
15—19 . . . . .	44·43	38·83	5·55
20—24 . . . . .	27·78	27·78	—
25—29 . . . . .	5·56	5·56	—
30—39 . . . . .	5·56	5·56	—
40—49 . . . . .	—	—	—
50—59 . . . . .	11·11	11·11	—
<b>TOTAL</b>	<b>100·00</b>	<b>88·89</b>	<b>11·11</b>

*Source :* Report on Urban Labour Force Survey in Haryana—21st Round NSS published by Economic & Statistical Organization, Planning Department Government of Haryana.

(ii) The incidence of unemployment (percentage of unemployed to the

labour force) in different segments of the population is mentioned in Table-16.

TABLE-16

*Incidence of unemployment by age and sex (Haryana Urban)*

Age Group Years		Male	Female	Persons
14—19	.	9·85	18·17	10·97
20—24	.	3·42	..	3·07
25—29	.	0·54	..	0·49
30—59	.	0·46	..	0·42
Aggregate		1·41	1·80	1·45

Source : (21st Round of NSS—Report published by the Economic & Statistical Organisation, Planning Department, Haryana).

The highest incidence of unemployment was found in the age group 14-19 and it could be attributed to the fact that most of the fresh entrants to the labour force fell in this age group. It may be added that out of all unemployeds the percentage of fresh entrants was as high as 77.79 and they accounted for all the unemployeds in the age group 14-24. The percentage of unemployed looking for work not for the first time was 21.21 and they all belonged to the age groups 25-39 and 50-59.

(iii) The percentage distribution of unemployed persons by sex and educational standard is given in Table-17.

TABLE-17

*Percentage distribution of unemployed persons by sex and educational standard*

(Haryana Urban)

Educational Standard		Persons	Male	Female
1. Graduates	.	11·10	11·10	..
2. Other than Graduates having Technical Education	.	16·67	16·67	..
3. Secondary	.	11·10	5·55	5·55
4. Literate but below Primary	.	44·46	38·90	5·56
5. Illiterate	.	16·67	17·67	..
TOTAL		100·00	88·89	11·11

It is notable that the percentage of illiterate persons among unemployed was only 16.67 and they were all males. All of the female job seekers were literate and almost half of them had passed the secondary examination.

The incidence of unemployment was highest (3.50%) among the graduates and lowest among the illiterates. It was 0.96% among those with qualifications of matriculation/higher secondary and 1.48% among under-matriculates. Thus in urban areas the problem of educated unemployment was acute. The fact is borne out by the data of employment exchanges given in subsequent paragraphs.

(iv) 61.12 per cent of the unemployed persons had remained unemployed for less than a year; 33.32 per cent for a period ranging from one to two years; and 5.56 per cent for more than a year. In the third category all were illiterate persons. 37.51 per cent of the literates below primary, 50.00 per cent of those who had passed secondary examination and 66.55 per cent of the unemployed persons other than graduates having technical education, had been waiting for employment for a period ranging between one to two years. It is apparent that the persons with technical qualifications did not have adequate openings. In the survey conducted by the Directorate of Employment, Haryana to find out the employment and extent of unemployment among the Engineering graduates it was found that 11.5 per cent of the respondents had to wait for 12 to 18 months for getting an employment.

(v) 50 per cent of the unemployed persons were registered with the employment exchanges. Out of them nearly 89 per cent were males and the rest females. Of those registered with employment exchanges, 33.32 per cent were other than graduates having some technical education, 55.56 per cent were literate but below secondary and 11.12 per cent were illiterate persons.

#### *(vi) Employment exchange data on unemployment*

In Table No. 18 data on the number of job seekers on the live register of employment exchanges in Haryana is being given for the years 1966 to 1971.

TABLE-18

*Number of applicants on the live register of employment exchanges in Haryana and their percentage distribution by educational standard*

Date of Counting	Percentage of Registered Job Seekers					Total No. of Job Seekers	Percent Increase Over 1966
	Literate below Matric & Illiterates	Matric	Intermediate	Graduate & above	Total		
31-12-66	. .	66.49	26.20	4.77	2.54	100.00	36,522 ..
31-12-67	. .	55.37	34.02	6.91	3.70	100.00	39,320 7.7
31-12-68	. .	48.87	36.90	8.86	5.37	100.00	47,151 29.1
31-12-69	. .	47.63	35.96	9.34	7.07	100.00	60,115 64.6
31-12-70	. .	48.38	35.19	9.94	6.49	100.00	82,843 126.8
31-12-71	. .	43.79	28.90	9.79	7.52	100.00	104,398 186.0

Due to their limitations, e.g., partial coverage in respect of areas, failure to bring all the unemployed persons in its fold and indiscriminate registration of employed, persons seeking alternative jobs and the real unemployed, the Employment Exchange data do not help in gauging the correct unemployment or underemployment position.

However, the live register statistics from 1961-71 show a persistent rise in the number of job-seekers in the State. Among the job seekers the percentage of educated persons has been constantly rising. It is also seen that the percentage of applicants having pre-university or university degree has also been going up.

According to the data for 31st Dec., 1971, among those who had passed matriculation or higher examination the percentage of the graduates and post-graduates was as high as 16.07. They included 208 graduates in Engineering (0.57%), 231 graduates and post-graduates in Agriculture (0.47%), 63 graduates and post-graduates in Medicine, 7, post-graduates in engineering (0.02%).

In the publication "Employment Trends & Manpower Situation in Haryana" the Economic and Statistical Organisation, Planning Department, Haryana has estimated the following surpluses in respect of technical and educated manpower in 1970-71.

(1) Engineering Personnel . . . . .	{	34,707 Diploma/Certificate holders
	{	4,714 Others
	{	5 Graduates
(2) Agricultural Personnel . . . . .	{	171 Post-graduates
	{	209 Graduates
	{	350 Diploma/Certificate holders
(3) Animal husbandry personnel . . . . .	{	205 Graduates & Post-graduates
(4) Forest personnel . . . . .	{	190 Foresters
(5) Educational personnel . . . . .	{	3,701 Post-graduates

In another publication "Requirement and Availability of Medical & Health Personnel in Haryana (1969-70)," the Department of Planning has estimated that during the period 1969-74 the out-turn of staff nurse would be 645 against the total requirement of 297.

(vii) Adequate data are not available in respect of the prevailing under-employment in the State. According to a rapid sample survey of the employment, unemployment and under-employment situation conducted in 1963 by the Economic and Statistical Organization of the composite State of Punjab, the intensity of underemployment was found to be the highest in the rural areas of Gurgaon and Mahendragarh districts, being 46 per cent. However, these figures are very old and much progress has been made in the sphere of agriculture in the State.

The findings of the Economic and Statistical Organisation, Government of Haryana based on Sample Survey conducted during November, 1969 and October, 1970 are given in Table No. 19 below :

TABLE-19

*Percentage of underemployed persons in Haryana*

Particulars	Male	Female	Persons
1. Percentage of persons in labour force to population . . . . .	43·00	18·37	31·48
2. Employed persons in the labour force :			
(i) Percentage of the population . . . . .	41·99	18·11	30·81
(ii) Percentage of the labour force . . . . .	97·65	98·59	97·90
3. Percentage of underemployed persons to the number of employed persons. . . . .	3·83	3·58	3·76

On the basis of the above figures it is estimated that 24.9 lakhs of total rural population formed the effective labour force. It was constituted by 24.4 lakhs employed and 0.52 lakhs unemployed persons. Out of the employed persons in labour force 0.94 lakhs were under-employed in 1969-70.

According to the report on the 21st Round of National Sample Survey (1966-67) out of the total gainfully employed persons at work during the reference week 51.80 per cent worked for 56 hours or more and 36.17 per cent for 42 to 55 hours. Rest of the persons were engaged in work for less than 42 hours. The intensity of employment, in terms of hours worked during the reference week was more in case of males than among females. However, there was practically no under-employment in urban areas as only about 0.57 per cent of the employed persons were reported to be available for extra work at the normal rate of remuneration. According to this, the number of employed persons amounted to 3.24 lakhs in the estimated population of 12.95 lakhs at that time. Out of them the number of underemployed persons comes to 18,470 persons roughly.

The above statistics are not very meaningful as they do not indicate either the sector of employment where the employment is not full in intensity, or the period for which they are available, or the extent of their being under-worked. Further there is no information about the age, educational qualifications etc. of these persons or type of work they were available for.

The aforesaid NSS report also indicates that 0.4 per cent of the total employed persons were reported to be registered with the Employment Exchanges for better employment. Of these 50 per cent were matriculates and the rest under-matriculates.

The Directorate of Employment, Haryana, similarly, conducted a survey to assess the pattern of employment and extent of unemployment of the engineering graduates who passed out from the Colleges of Engineering at Patiala, Chandigarh and Ludhiana and Department of Chemical Engineering, Punjab University during the years 1964 and 1965.

Among other items they covered the subject of suitability of job in which the engineers had got themselves employed. The results are given in the Table-20 below :

TABLE-20

*Percentage of the engineering Graduates who found their job and salary suitable or not suitable*

Graduates having qualifica-tions	Jobs			Salary		
	Suit-able	Not Suit-able	Total	Suit-able	Not Suit-able	Total
(1) Chemical Engineering .	54·6	45·4	100·0	53·8	46·2	100·0
(2) Aeronautical Engineering	60·0	40·0	100·0	100·0	..	100·0
(3) Civil Engineering .	44·3	56·7	100·0	38·7	61·3	100·0
(4) Electrical Engineering .	54·6	45·4	100·0	36·2	63·8	100·0
(5) Mechanical Engineering	61·9	38·1	100·0	51·6	48·4	100·0
(6) Mechanical Engineering	50·4	49·6	100·0	44·1	55·9	100·0

Almost half of the engineers did not consider their job suitable. The percentage of those who considered their salary unsuitable was higher i.e., 55.9. However, the number of persons who responded to the enquiry made was inadequate. The results, therefore, cannot be generalised. No other survey of the type appears to have been conducted to confirm the findings.

#### (viii) Special surveys :

##### (1) NSS—25th Round :

The National Sample Survey in its 25th Round (1970-71) conducted enquiry into the economic activities of the weaker section of population. The results are available in respect of employment and availability for work of the persons in the small cultivators households and non-cultivating wage earner households. The population covered formed 2.00 and 10.00 per cent respectively of the total State population as per 1971 Census.

The interesting results of the survey are mentioned below :

#### A. Small cultivator households

(i) A distribution of the total mandays of the reference week by sex and age-group is given in the Table-21.

TABLE-21

*Percentage distribution of estimated number of mandays spent per week under different type of economic and other activities*

Age Group	Male			Female			Persons		
	With Work		Not Available for Work	With work		Not Available for Work	With Work		Not Available for Work
	At Work	Not at Work	Seeking or Available for Work	At Work	Not at Work	Seeking or Available for Work	At Work	Not at Work	Seeking or Available for Work
0-9	1.8	..	98.2	..	..	..	100.0	0.9	..
10-14	12.5	0.8	86.7	2.9	..	97.1	7.9	0.4	..
15-44	74.1	3.3	3.9	18.7	25.2	..	74.8	51.0	1.7
45-59	94.1	4.1	..	1.5	14.7	..	85.3	58.2	2.2
60 & above	95.4	4.6	..	..	16.7	..	83.3	52.5	10.0
TOTAL	48.5	2.2	1.6	47.7	11.4	0.7	..	57.9	30.0
								1.6	0.8
									67.6

It will be seen from the above statement that the engagement of females in gainful activity was only to the extent of 12.1% and the incidence of unemployment was nil, while among the males the engagement in gainful activity was to the extent of 50.7%, unemployment to the extent of 1.6% and incidence of unemployment of the order of 3.1%. The overall incidence of unemployment was 2.5% only. The participation of women was nil in the age group 0-10 and much lower than men in the age group 10-14. In the age group 60 and above also the female participation in gainful activities was very low. Mostly it was the women in the age group 15-44 who participated in economic activities.

(ii) Only 42% of the households reported possibility of supplementing their income by taking to agricultural activities like dairying, poultrying, etc. 98% of them wanted to have financial assistance to the tune of Rs. 1000 and above.

(iii) Of the households knowing some non-agricultural occupation or trade, 36% reported knowledge of manufacturing, 36% transport, and 18% trade. 90% of them were willing to take up non-agricultural activities only on the provision of finance of Rs. 1,000 and above.

(iv) Only 42% of the households reported willingness to take up regular wage paid employment—37% of them were prepared to go out of their village. Two-thirds of them, however, wanted a guarantee regular employment. Out of 20,010 such persons, 90 per cent were males and 10 per cent females. All the females belonged to the age group 15-44. But out of such males, nearly 85% were in the age group 15-44 and the rest in the age group 45-59 years. Their percentage distribution by educational standards is given in Table-22.

TABLE-22

*Percentage distribution of the member of small cultivator households willing to take up employment outside village*

Educational Standard	Percentage
Illiterate . . . . .	46.4
Literate but below Primary . . . . .	7.2
Primary . . . . .	24.6
Middle . . . . .	5.8
Secondary . . . . .	14.5
Above secondary . . . . .	1.5
TOTAL . . . . .	100.0

(v) 84.1 per cent of the above mentioned persons opted for employment on public works, 8.7 per cent for unskilled manual work, 4.3% for non-clerical, non-manual work and 2.9 per cent for clerical work. However, it is not known how many of these persons were unemployed seeking work or available for work, or how many were underemployed or not satisfied with their employment and, therefore, hankering after alternative full-time employment.

#### B. Non-cultivating wage earner households :

(a) The time disposition pattern of the members of these households is given in Table-23.

TABLE-23

*Percentage distribution of estimated number of man-days spent per week under different activities by persons belonging to various age-sex groups*

The participation of women in the gainful activity was upto 12.0 per cent of the mandays. None of them was unemployed in the sense of seeking or available for work. Among males, the extent of employment was upto 45.3 per cent and unemployment to the extent of 3.2 per cent. The incidence of unemployment counted as the percentage of days of unemployment to the total number of days with work and available for work in their case was 6.6. The overall participation in employment was 29.4 per cent, unemployment 1.6 per cent and incidence of unemployment 5.2%. In comparison with the small cultivator households, the participation of male members in economic activity was less and incidence of unemployment more. Participation of women in both the sections of the population was equal.

(ii) 86 per cent of the households reported possibility of supplementing their income with ancillary agricultural activities. 98.4% of such households, however, wanted financial assistance of Rs. 1,000 and above. More than half of the households wanted to take to dairying.

(iii) 75 per cent of the households reported knowledge of some manufacturing activity. In this respect they were far better than the small cultivator households. 78.6 per cent of the households reported their willingness to take up such non-agricultural activities with a provision of Rs. 1,000 and above while 21.4% indicated need for a smaller amount within the range of Rs. 500 to 749.

(iv) 57 per cent of the households had some members willing to shift to full-time employment and of these, 49 per cent were prepared to go outside their village. 34 per cent of them wanted guaranteed regular employment. The rest of the 43 per cent households either considered their employment in the village adequate and economical or could not get spared from their agricultural pursuits.

(v) The distribution of persons willing to take up employment outside their villages by sex and educational standard is given in Table-24.

TABLE-24

*Percentage distribution of persons willing to take up employment outside village by sex*

Educational Standard	Male	Female	Persons
1. Illiterate . . . . .	58.2	100.0	61.0
2. Literate but below primary . . . . .	9.1	..	8.5
3. Primary . . . . .	21.8	..	20.3
4. Middle . . . . .	9.1	..	8.4
5. Secondary . . . . .	1.8	..	1.7
6. Above Secondary . . . . .	..	..	..
TOTAL . . . . .	95.2	6.8	100.0

(vi) Almost all the women willing to take up employment outside the village opted for job in public works. Among men, 89.1 per cent preferred public works, 9.1 per cent unskilled manual and 1.8 per cent manual skilled. All of these persons belonged to the age groups 15-44 and 45-59. Men giving preference to jobs other than those connected with public works sought annual wage in the ranges of Rs. 1,601 to Rs. 2,000 (16.7%), Rs. 2,001 to 2,500 (50.0%), and Rs. 2,501 and above (33.3%).

2. During 1969-70, the Department of Economics, Punjab University, Chandigarh, undertook a study of the impact of the so-called Green Revolution. The report of that study has been published by the Government of Haryana under the Title "Changing Structure of Agriculture in Haryana". The coverage of the study extended to :—

- (i) Very small peasants with operational holdings upto 5 acres.
- (ii) Small peasants with operational holdings between 5 acres to 10 acres.
- (iii) Middle peasants with operational holdings between 10 acres to 20 acres.
- (iv) Big peasants with operational holdings of more than 20 acres but less than 30 acres.
- (v) Very big peasants with operational holdings more than 30 acres.
- (vi) Those who had no operational holdings. Out of the effective sample of 885 households 142 were agricultural labour house-holds. For the study the State was divided into three regions.
  - (a) Northern region comprising Ambala, Karnal and Jind Districts.
  - (b) Central region comprising parts of Hissar and Rohtak districts.
  - (c) Southern region comprising Bhiwani and Loharu Tehsils of Hissar district, Jhajjar Tehsil of Rohtak district and Gurgaon and Mohinder-garh districts.

The findings of the report having a bearing on employment and unemployment are given in the following paragraphs.

- (i) The percentage of agricultural labourers in the agricultural workers was 24.7 in the State and 29.8, 24.1 and 19.4 in the aforesaid three regions. The extent of literacy among the agricultural labourers was 4.5 per cent.
- (ii) The annual income of landless labour households in the three regions was Rs. 2,098 (Northern), Rs. 2,412 (Central and Rs. 1,864 (Southern); the per capita income per annum being Rs. 346, Rs. 391 and Rs. 350 respectively.
- (iii) The percentage of actual days of work to the available days were 61 in Northern, 52 in Central and 38 in the Southern region. The State average was 51. Thus the workers belonging to agricultural labour households were unemployed for about two-fifths of the time in the North, one-half of the time in the Centre and three-fifths of the time in the South, where green revolution has not made much impact and opportunities of employment are limited.

To sum up, it may be stated that the absence of adequate statistics is the major obstacle in making any estimate of unemployment or under-employment. However, the data reveal that the participation rate among women has been very low and similarly incidence of unemployment among the rural labour force has been negligible. In the urban areas, however, the incidence of unemployment is higher. The extent of unemployment among the men is more than among women.

### HIMACHAL PRADESH

According to 1971 Census Himachal Pradesh had a population of 34,24,332 with 50.67 per cent males and 49.33 per cent females. 92.9 per cent of the population resided in villages and 7.1 per cent in urban areas. The density of population in the State was 62 per sq. km.

#### **Labour Force**

In the Table No. I the data pertaining to labour force as per 1971 Census are given. They have been computed by adding the number of 'Workers' classified on the basis of the major time disposition activity, 'non-workers' having some gainful activity as their subsidiary engagement, and non-workers of the residuary category 'others' who include persons without any gainful work as their major or subsidiary activity or specific non-gainful activity as their engagement, and who were reported to be searching for a job.

**TABLE-I**

*Persons categorised as workers, non-workers with subsidiary activity and residual sub-category of "other non-workers" and their percentage to the population (1971 census)*

Area/Sex	No. of Persons Classified as				Total of Cols. 2, 3 & 4	Percent- age of Persons in Col. 5 to Total Popula- tion
	Workers	Non- workers having Subsi- diary Activity	"Other" among Non- workers			
<i>State</i>						
Male	. .	8,98,334	600	14,800	9,13,734	52.66
Female	. .	3,62,472	3,400	4,400	3,70,272	21.92
Persons	. .	12,60,806	4,000	19,200	12,84,006	37.50
<i>Rural</i>						
Male	. .	8,23,033	600	12,400	8,36,033	52.35
Female	. .	3,54,691	3,300	3,500	3,61,491	22.80
Persons	. .	11,77,724	3,900	15,900	11,97,524	37.63
<i>Urban</i>						
Male	. .	75,301	..	2,400	77,701	56.28
Female	. .	7,781	100	900	8,781	8.48
Persons	. .	83,082	100	3,300	86,482	35.79

*Source :* (i) 1971—Provisional Population Tables—Paper I Supplement.

(ii) Tables B.VII and B.VIII obtained from the Registrar General, India.

The corresponding data according to the 1961 Census are given in Table—2.

TABLE-2  
*Labour force as per 1961 census*

Area	Sex	Percentage of Persons in Labour Force to the Population		
		Male	Female	Persons
State . . . . .	Male .	63.27		
	Female .	55.86		
	Persons .	59.71		
Rural . . . . .	Male .	63.60		
	Female .	57.77		
	Persons .	60.78		
Urban . . . . .	Male .	57.24		
	Female .	11.99		
	Persons .	38.16		

The data given in the Tables No. 1 and 2 are not comparable because of the differences in the concepts, reference period and in approach about the information on unemployment in the two censuses. Moreover the geographical area covered in the State in 1961 Census was far less than the area covered in 1971.

The NSS data on labour force are given in Table—3.

TABLE-3  
*NSS data on labour force in Himachal Pradesh*

NSS Round	Rural			Urban		
	Percentage of Population			Percentage of Population		
	Male	Female	Persons	Male	Female	Persons
18th Round (1963-64) . .		Not available		43.51	5.05	26.96
19th Round (1964-65)						
(i) Report No. 163 . .		Not available		55.90	9.49	36.96
(ii) Report No. 173 . .	57.17	23.60	39.85	51.12	0.91	28.50
20th Round (1965-66) . .		Not available		53.64	4.63	32.76
21st Round (1966-67) . .		Not available		53.92	4.73	31.84

Source : Reports No. 162, 163, 165, 173 and 181 of NSS published by the Cabinet Secretariat, Govt. of India.

The NSS data are based on current status obtaining during a shorter reference period of seven days preceding the date of enquiry and hence they are not comparable to the data from the two censuses. The sample size also in these surveys was very small.

2. Some characteristics of the unemployed persons :

(i) The labour force given in Table No. 1 is comprised of 'Workers' (classified as such according to main time disposition activity), non-workers having some gainful subsidiary activity and persons in the residual sub-category of other non-workers who did not have any gainful or non-gainful work as their main activity and reported to be seeking work. Their respective percentages in the total population and total labour force are given in the Table-4.

TABLE-4

*Percentage distribution of labour force by workers and non-workers  
(1971 Census)*

	Workers			Non-Workers with Subsidiary Activity			Non-Workers "Others"		
	M	F	P	M	F	P	M	F	P
(i) Percentage to total population.	51.77	21.46	36.82	0.04	0.20	0.12	0.85	0.26	0.56
(ii) Percentage to total labour force.	98.31	97.90	98.19	0.07	0.91	0.31	1.62	1.19	1.50

(ii) So far data on the distribution by age groups are available in respect of the 'workers' and other "non-workers". In the Table No. 5 the percentage distribution of 'Workers' by sex and age group and by age-specific rates is given. In respect of "other non-workers" the distribution is given in a subsequent paragraph.

TABLE-5

*Percentage distribution of "workers" by sex and age groups and their  
age-specific rates in the population*

Age Group	Distribution by Age Groups		Age Specific Rate in the Population	
	Male	Female	Male	Female
1	2	3	4	5
<i>All areas</i>				
0-14	.	.	3.33	11.52
15-19	.	.	7.89	14.72
20-24	.	.	12.40	14.24
25-29	.	.	12.68	13.08
30-39	.	.	21.40	20.48
40-49	.	.	17.10	13.65
50-59	.	.	12.90	7.65
60 and above	.	.	12.30	4.66
Age not specified	.	.	0.00	..
TOTAL	.	100.00	100.00	52.43
				20.79

TABLE-5—*Contd.*

	1	2	3	4	5
<i>Rural</i>					
0-14	.	3.52	11.71	4.40	6.11
15-19	.	8.08	14.94	47.13	34.39
20-24	.	12.14	14.08	90.20	37.91
25-29	.	12.35	12.92	97.94	37.20
30-39	.	20.87	20.38	98.33	35.49
40-49	.	16.97	13.64	97.91	33.29
50-59	.	13.13	7.65	96.71	29.01
60 & above	.	12.94	4.68	80.59	15.99
Age not specified	.	0.00	..	15.79	0.00
TOTAL	.	100.0	100.00	52.26	21.69
<i>Urban</i>					
0-14	.	1.20	2.74	2.04	0.49
15-19	.	5.73	4.91	28.62	3.02
20-24	.	15.32	22.03	74.00	13.70
25-29	.	16.34	20.08	95.20	15.69
30-39	.	27.34	25.40	97.25	13.71
40-49	.	18.70	14.22	96.21	12.90
50-59	.	10.26	7.02	92.19	11.61
60 +	.	5.10	3.60	61.71	6.47
Age not specified	.	0.01	0.00	87.50	..
TOTAL	.	100.00	100.00	54.53	7.06

## II. Unemployment

As mentioned earlier, in 1971 Census the residual sub-category "Other non-worker" is believed to be consisting of mainly those non-workers who did not have any subsidiary gainful activity, who could not be classified in the specific non-worker categories and who reported to be seeking gainful work or employment. Their percentage in the population and labour force is given in Table-6.

TABLE-6

*Percentage of "non-workers-others" in the population and labour force in rural and urban areas of Himachal Pradesh (1971 census)*

	Particulars	State	Rural	Urban
1. Number of "other non-workers":				
(i) Male	.	14,800	12,400	2,400
(ii) Female	.	4,400	3,500	800
(iii) Persons	.	19,200	15,900	3,300

TABLE-6—*Contd.*

Particulars	State	Rural	Urban
2. Percentage of non-workers others to population :			
(i) Male . . . . .	0·85	0·78	1·74
(ii) Female . . . . .	0·26	0·22	0·87
(iii) Persons . . . . .	0·56	0·50	1·37
3. Percentage of "other non-workers" to the labour force :			
(i) Male . . . . .	1·62	1·48	3·09
(ii) Female . . . . .	1·19	0·97	10·25
(iii) Persons . . . . .	1·50	1·33	3·82
4. Percentage of males among "other non-workers"	77·08	77·99	72·73
5. Percentage of females among "other non-workers"	22·92	22·01	27·27

The data on unemployment in the State available from 1961 Census are cited in Table—7.

TABLE-7  
*Data on unemployment as per 1961 census*

Particulars	नियमित नृपति	Rural	Urban	State
(i) Percentage of unemployed persons in the population :				
Male . . . . .	0·13	0·81	0·16	
Female . . . . .	0·03	0·06	0·03	
Persons . . . . .	0·08	0·50	0·10	
(ii) Percentage of unemployed persons in the labour force :				
Male . . . . .	0·20	1·42	0·26	
Female . . . . .	0·05	0·49	0·05	
Persons . . . . .	0·13	1·13	0·17	

However, the data in the Tables No. 6 and 7 are not comparable. Besides the difference in approach the area covered in the two censuses were different.

### B. NSS Data :

The data available from the Reports of the National Sample Survey pertaining to the 18th, 19th, 20th and 21st Rounds are given in Table-8.

TABLE-8

*Data on unemployment as per National Sample Survey Reports (1963-64 to 1967-68)*

Rounds of NSS	Percentage of Unemployed Persons to the Population			Percentage of Unemployed Persons to Labour Force		
	Male	Female	Persons	Male	Female	Persons
<b>Rural :</b>						
19th Round (1964-65) Report No. 173 . .	Nil	Nil	Nil	Nil	Nil	Nil
<b>Urban :</b>						
18th Round (1963-64) Report No. 152 . .	Nil	Nil	Nil	Nil	Nil	Nil
19th Round (1964-65) Report No. 163 . .	0·44	Nil	0·26	0·78	Nil	0·70
Report No. 173 . .	Nil	Nil	Nil	Nil	Nil	Nil
20th Round (1965-66) Report No. 166 . .	1·35	Nil	0·76	2·52	Nil	2·32
21st Round (1966-67) Report No. 181 . .	Nil	Nil	Nil	Nil	Nil	Nil
22nd Round* (1967-68) . .	NA	NA	NA	1·86	1·38	NA

\*Source : The Report of the Committee of Experts on Unemployment Estimates, Planning Commission, Government of India, 1970, p. 92.

NOTE : NA= Not available.

The data of the 19th Round in reports No. 163 and 173 are based on two different concepts. While in the former the criteria were (i) absence of work during the reference week, (ii) active search for work through registration with employment exchanges or contacting prospective employers either personally or through applications during the week or two months preceding the date of enquiry; in the latter, although the reference period was the same, no emphasis was laid on active search for job. All those who had no work and reported to be available for work were treated unemployed in the rural as well as urban areas.

The NSS data are also not comparable to those obtaining from the two censuses.

#### 2. Some characteristics of the unemployed persons :

- (i) The distribution of persons classified as 'other non-workers' in 1971 Census by sex and age group is given in Table-9.

TABLE-9  
Percentage distribution of "other non-workers", i.e.,  
"non-agricultural workers" among the population

Age Groups	Rural				Urban				Total Rural and Urban			
	Percentage Distribution by Age Groups		Proportion to Population in Corresponding Age Groups		Percentage Distribution by Age Groups		Proportion to Population in Corresponding Age Groups		Percentage Distribution by Age Groups		Proportion to Population in Corresponding Age Groups	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
0—14	17.74	28.57	0.33	0.15	..	..	..	..	14.86	22.73	0.30	0.14
15—19	32.26	34.29	2.74	0.80	33.33	44.44	1.81	3.36	32.43	36.36	2.98	0.99
20—24	29.08	14.29	3.14	0.39	37.50	44.44	5.96	3.40	30.41	20.45	3.46	0.44
25—29	4.84	8.57	0.56	0.25	8.33	11.12	1.54	1.07	5.41	9.09	0.67	0.31
30—39	7.26	5.71	0.50	0.10	8.33	..	0.94	..	7.43	4.55	0.54	0.09
40—49	4.84	5.71	0.41	0.14	4.17	..	0.68	..	4.73	4.55	0.43	0.13
50—59	3.23	..	0.35	..	4.17	..	1.19	..	3.38	..	0.40	..
60+	0.80	2.86	0.07	0.10	4.17	..	1.60	..	1.35	2.27	1.14	0.10
TOTAL	100.00	100.00	0.76	0.22	100.00	100.00	1.73	0.87	100.00	100.00	0.84	0.26

In the age group 15 to 59 the proportion of "Other-non-workers" in the corresponding population was 1.38 per cent among males, and 0.37 per cent among females as per 1971 Census.

*Age specific incidence of unemployment:*

The data available from the 1961 Census on incidence of unemployment in the labour force by age group are given in Table-10.

TABLE-10

*Percentage of unemployed persons to the persons in labour force  
(1961 census)*

Age Group	Rural			Urban		
	Male	Female	Total	Male	Female	T
0-14 . .	0.16	0.09	0.12	1.93	1.58	
15-34 . .	0.32	0.06	0.19	1.96	1.81	
35-59 . .	0.10	0.04	0.07	0.65	0.59	
60+ . .	0.03	0.03	0.03	0.68	0.60	
<b>TOTAL . .</b>	<b>0.20</b>	<b>0.05</b>	<b>0.13</b>	<b>1.92</b>	<b>1.30</b>	

The majority of unemployed persons were in the age-group 15-30 followed by the age group 0-14. A majority of them were new entrants to the labour force. The percentages of new entrants among the job seekers are in the Table-11.



TABLE-11

*Percentage of persons seeking work for the first time to the total job seekers  
(1961 census)*

Sex	Rural	Urban	%
Male . . . . .	53.00	61.79	5.33
Female . . . . .	43.96	68.75	5.96
<b>TOTAL . .</b>	<b>51.38</b>	<b>62.15</b>	<b>5.94</b>

The age-wise distribution of the persons classified as non-workers having subsidiary activity in 1971 Census is not available to give the specific incidence rate of unemployment.

*Educational standard :*

The distribution of Non-workers—"Others" aged 15 and above by sex and educational standard according to 1971 Census is given in Table—12.

TABLE-12

*Percentage distribution of non-workers 'others' by sex and educational standard (1971 census).*

Educational Standard	Rural			Urban		
	Persons	Male	Female	Persons	Male	Female
1. Illiterate . . .	29·92	23·53	56·00	15·15	16·66	11·11
2. Literate but below Primary	7·09	7·84	4·00	6·06	8·33	..
3. Primary . . .	13·39	13·79	12·00	24·24	29·17	11·11
4. Middle . . .	11·81	12·75	8·00	9·09	12·50	..
5. Matriculation or Higher Secondary.	33·07	36·27	20·00	27·27	25·00	33·33
6. Non-technical Diploma or Certificate not equivalent to Degree.	..	..	..	..	..	..
7. Technical Diploma or Certificate not equivalent to Degree.	..	..	..	..	..	..
8. Graduates and above .	4·72	5·88	..	18·19	8·34	44·45
TOTAL .	100·00	100·00	100·00	100·00	100·00	100·00
No. of Persons . .	12,700	10,200	2,500	3,300	2,400	900

In the urban areas in the category 'graduates and above' (600 persons) there were 67 per cent graduates (other than technically qualified) and 33 per cent graduates with technical diploma equivalent to degree (200 males graduates, 200 female graduates and 200 females possessing degree in education).

In the 1971 Census a special card was circulated to obtain economic particulars about graduates and persons having technical certificate or diploma. 14,316 men and 2,970 women responded. Among the respondents, 6.26 per cent men and 14.58 per cent women were reported to be unemployed. Data on the distribution of state-wise population by educational standard is not available and therefore, it can not be ascertained whether the percentage of unemployed persons among the respondents reflects, in any way, the actual extent of unemployment among the degree holders and technical personnel. However, the distribution of the unemployed respondents by subject field is given in Table—13.

TABLE-13

*Percentage distribution of unemployed persons responding to the special card by subject field and level of education  
(1971 census)*

Subject Field	EDUCATIONAL LEVEL										Total Number of persons by subject field (100 %)			
	Percentage of Unemployed Persons among Respondents by subject Field		Doctorate		Master/Post- graduate Degree		Bachelor or equivalent		Diploma					
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female				
1. Arts/Humanities	6.74	10.56	0.18	..	9.67	19.68	89.61	78.71	0.36	1.61	0.18	..	548	371
2. Commerce	1.02	..	..	..	16.67	..	83.33	..	..	..	..	..	18	..
3. Agriculture	4.68	40.00	3.85	..	7.69	..	84.61	100.00	3.85	..	..	..	26	2
4. Veterinary Sci- ence/Medicine,	0.65	..	..	..	100.00	..	..	..	..	..	..	..	1	..
5. Science	11.71	23.19	..	..	17.34	35.56	80.93	62.22	1.73	2.22	..	..	173	45
6. Engineering & Technology.	3.33	..	..	..	2.13	..	32.98	..	62.76	..	2.13	..	94	..
7. Medicine (Allo- pathy),	1.61	8.24	..	..	..	..	83.71	100.00	14.29	..	..	..	7	7

8. Medicine (Others).	3.09	..	..	16.67	..	50.00	..	33.33	..	..	..	6	..
9. Nursing	..	..	..	..	..	..	..	..	..	..	..	..	..
10. Technical and Vocational Trade	7.05	33.33	..	..	4.55	..	..	..	18.18	33.33	77.27	66.67	22
11. Others	1.58	16.13	..	..	..	60.00	100.00	20.00	..	20.00	..	..	1
12. Total by level of education.													
(i) Percentage	6.26	14.58	0.22	..	10.38	21.25	19.13	76.21	8.04	2.08	2.23	0.46	..
(ii) No. of per- sons.	896	433	2	..	93	92	709	330	72	9	20	2	896
													433

Source : G Series data obtained from the Registrar General, India.

Duration of unemployment in months reported by the above said respondents is indicated in Table—14.

TABLE-14

*Percentage distribution of unemployed graduates & technical personnel by subject field and duration of unemployment (1971 census)*

Sl. No.	Subject Field	Duration of Unemployment in Months												Period not Specified	
		0—6		7—12		13—24		25 and above		M		F			
		M	F	M	F	M	F	M	F	M	F	M	F		
1. Arts/Humanities	•	10.77	7.28	35.22	19.95	13.87	14.56	10.03	23.71	30.11	34.50				
2. Commerce	•	..	..	16.67	..	22.22	..	22.22	..	38.89	..				
3. Agriculture	•	15.38	100.00	57.69	..	..	..	3.85	..	23.08	..				
4. Veterinary Science	100.00	..	..	..	..	..	..	..	..	..	..				
5. Science	•	15.61	20.00	42.78	31.11	14.45	8.89	3.47	17.78	23.70	22.22				
6. Engineering & Technology	•	15.96	..	44.68	..	6.38	..	11.70	..	21.23	..				
7. Medicine (Allopathy)	•	28.57	57.14	..	..	..	..	14.29	14.29	57.14	28.57				
8. Medicine (Others)	•	..	..	..	..	16.67	..	16.67	..	66.66	..				
9. Nursing	•	..	..	..	..	..	..	..	..	..	..				

10.	Technical and Vocational trades.	..	..	27.27	66.67	13.64	..	22.73	33.33	36.36	..
11.	Others	..	..	..	60.00	..	20.00	..	20.00	100.00	
12.	(i) Total Percentage.	12.05	9.24	31.17	21.94	12.84	13.63	9.37	22.86	28.57	32.33
	(ii) No. of persons.	108	40	333	95	115	59	84	99	896	433

Source : G Series data obtained from the Registrar General.



### III Employment Exchange Data :

The registrants on the live register of the Employment Exchanges include persons without any employment as well as persons already employed but seeking better jobs or persons continuing on the live-register who have since secured jobs but did not inform the Employment Exchanges about it. It also contains persons pursuing studies but registered in the hope of getting some employment when they have completed their studies or waiting for employment. To ascertain the proportion of unemployed persons among these registrants the Directorate of Economics & Statistics, Himachal Pradesh conducted a sample survey of the registrants on the live registers of Mandi and Chamba Employment Exchanges in September 1962. It was found that only 68.2 per cent registrants of Mandi exchange and 67.3 per cent registrants of Chamba exchange were unemployed. Due to its limited coverage and subsequent changes during the years which followed the data thrown by the survey cannot be used now. The Directorate General of Employment and Training, in 1968, conducted another such survey which, too, was based on very inadequate sample size, and therefore, it does not appear appropriate to apply the results of the survey to find out the actual number of persons on the live register not having any job. However, the rising trend in the number on the live register does indicate the increase in the magnitude of unemployment.

In the Table No. 15 the figures for the last 6 years pertaining to the monthly average registrations, placements and number of registrants on the live register at the end of the year are given.

TABLE-15

*Average monthly registration and placement and number of applicants on the live register at the end of the year from 1966 to 1971 and on 30th June, 1972*

Year	Average Registration	Average Placement	Percentage Cols. 3/2	Number of Applicants on the Live Register at the end of the year	Per cent Change Over 1966
1966 . . .	3,023	680	24.5	20,758	100.00
1967 . . .	4,989	729	14.6	24,052	+15.87
1968 . . .	3,957	798	20.2	42,771	+106.05
1969 . . .	4,129	949	23.0	50,904	+145.23
1970 . . .	4,063	684	61.8	44,334	+113.58
1971 . . .	5,441	856	15.7	45,273	+118.10
30th June, 1972	9,482	6,750	71.2	51,483	+148.02

At the end of the year 1971 out of 45,273 persons registered with the employment exchanges, there were 90.93 per cent males and 9.07 per cent females. Their distribution by age group and educational standard is given in Table—16.

*men and women on the live register of employment exchanges as on  
31-12-1971 by age group, sex and educational standard*

Educational Level	Male						Female									
	Age Group						Age-Group									
	0-14 years	15-19	20-24	25-34	35-44	45-54	55 & above years	0-14	15-19	20-24	25-34	35-44	45-54	55 & above	Total	
1. Below Middle	75.00	47.64	56.58	64.89	63.23	76.40	94.34	57.60	100.00	45.55	37.76	56.64	88.89	..	42.97	
2. Middle School Standard	25.00	22.07	16.73	11.25	15.92	12.02	3.77	16.35	..	7.19	6.79	7.08	0.93	..	6.77	
3. Matriculate	..	26.19	17.15	18.55	16.83	9.24	1.89	19.09	..	40.22	35.64	20.06	2.78	100.00	..	34.95
4. Higher Secondary.	..	2.52	3.66	3.74	3.66	2.34	..	3.43	..	4.10	9.30	2.66	..	..	..	6.95
5. Graduate	..	1.57	5.33	1.15	0.36	..	..	3.16	..	2.94	9.11	9.44	2.78	..	..	7.09
6. Post—Graduate	..	0.01	0.55	0.42	..	..	..	0.36	..	1.40	4.13	4.63	..	..	..	1.27

*Source : Data obtained from Directorate General of Employment & Training (New Delhi).*

#### IV Poverty line approach :

Following Dandekar-Rath, people who do not consume enough food to satisfy the minimum nutrition requirement of 2,250 calories per day are assumed to be below the poverty line. The Federation of Indian Chambers of Commerce and Industry, to examine the implication of the Fifth Plan, set up a sub-committee under the chairmanship of Dr. Bharat Ram. The Committee estimated per capita figures for the year 1969-70 from per capita income figures in 1969-70 (at 1960-61 prices) and on the basis of an assumed linear relationship estimated that in October, 1969, 34.1 per cent of the 3.3 million population (or 1.1 million persons) had per capita income of 725 per annum and were below the poverty line.

#### Summary

Due to the changes which have been taking place in the jurisdiction this state since its birth in 1948, the only source of having some information the economy of the state, as it now exists, is 1971 Census. According to t source data regarding proportion of persons categorised as non-workers oth is given in Table—17. The available NSS data on unemployment are being cited, although due to very inadequate sample size, it is doubtful whe the data would reflect the correct position.

TABLE-17

*Percentage of unemployed persons to the population*

Source	All Areas	Rural	Urban
<b>1971 Census</b>			
Male	0·85	0·78	1·7
Female	0·26	0·22	0·8
Persons	0·56	0·50	1·1
<b>NSS 19 th Round (1964-65)</b>			
	NA	Nil	0
<b>NSS 21st Round (1966-67)</b>			
	NA	NA	
<b>NSS 20th Round (1965-66)</b>			
	NA	NA	

(NA=Not available)

The data are not comparable. The NSS data for any later peri're not available.

## KERALA

**Population :**

According to 1971 Census, the population of Kerala was 2,21,80,397. It consisted of 1,05,38,873 males (49.5%) and 1,07,41524 females (50.5%).

**Labour Force :**

The 1971 Census has so far published data about workers and non-workers classified according to their usual major time disposition being some gainful works or otherwise. The figures are given in Table—1.

TABLE-1

*Percentage of workers to the population—Kerala (1971 census)*

Area	Percentages to Total Population		
	Male	Female	Persons
Rural . . . . .	44·66	14·29	29·30
Urban . . . . .	43·33	10·50	26·93
Total for the State . . . . .	44·44	13·68	28·91

The above figures do not account for the total labour force as they do not include (i) the persons having some gainful work as their subsidiary activity only and (ii) the persons seeking and/or available for some gainful work.

The data on labour force available from 1961 Census, NSS Reports and the Survey undertaken by the Bureau of Economics and Statistics, Kerala, in 1965 are given in Table—2.

TABLE-2

*Percentage of population in labour force in Kerala*

Survey Reports	Rural			Urban		
	Male	Female	Persons	Male	Female	Persons
(1) 1961 Census . . . . .	48·86	21·24	34·86	48·79	12·91	31·32
(2) NSS-16th Round (1960-61) (State Sample)	41·90	15·84	28·81	48·28	14·26	31·37
(3) NSS-17th Round (1961-62) (Central Samples)	..	..	..	50·57	14·27	32·63
(4) NSS-18th Round (1963-64) (Central Samples)	..	..	..	47·77	15·96	32·91
(5) NSS-19th Round (1964-65) (Central Samples)	46·96	25·53	35·63	48·70	18·89	33·62
(6) Survey undertaken by the Bureau of Economics and Statistics (1965)	45·92	18·35	31·99	46·46	18·18	32·37
(7) NSS-20th Round (1965-66)	..	..	..	46·14	14·45	30·57
(8) NSS-21st Round (1966-67)	..	..	..	48·13	16·47	32·50

The labour force included the persons having employment and also those who were seeking and/or available for employment. The concepts and the reference period which formed the basic of classification differed both the respect of employed and unemployed persons.

In the Census, the classification of workers was done mainly on the basis of their usual or normal gainful activity. A person was treated as employed if on any one of the fifteen days preceding the day on which he was enumerated, he was having the same gainful activity as the regular vocation. In case of seasonal work, the persons who had some regular work at least for more than one hour a day throughout the greater part of the season were treated as workers.

The NSS and the Bureau of Economics and Statistics adopted the reference period of one week (7 days preceding the date of enquiry) and a person who had worked even for one hour on any of the days of the reference week was treated as employed. Those who were absent from their work to which they were attached, due to some social or domestic work or rest or on the grounds of health were also treated as employed.

In case of 'unemployed' persons in the urban surveys the NSS adopted the criteria that the person to be classified as unemployed should be in the age group 14 to 59 have looked for work (i) by being on the live register of employment exchange, (ii) by having put in written application for salaried jobs two months preceding the date of survey and (iii) by having contacted prospective employers at least once during the reference week or the preceding two months. Persons who expected a recall to jobs which they had temporarily left and had not made any tangible effort to secure employment believing that no alternative opportunity existed and also those who did not have any job and wanted to start their own business but could not do so owing to lack of necessary facilities, were also treated as unemployed.

The definitions adopted by the Bureau of Economics, Kerala, in their survey of 1965 were similar to that used by the NSS. However, among unemployed persons not seeking but available for or willing to undertake gainful work under normal terms and conditions, were also included.

The above-mentioned difference in the definitions is partly responsible for the difference in the findings of the Census and other surveys mentioned in the above Table. In respect of rural areas, the results of the 16th Round and the 19th Round of the NSS and the survey undertaken by the Bureau of Economics and Statistics are also different in spite of the similarity in the concept and the reference period. Due to this reason and lack of data for recent years, it is difficult to have any estimate of the present labour force in the rural areas of Kerala.

In the urban areas, the results are consistent and the percentage of population in the labour force appears to be about 32.

For the State as a whole, the Bureau of Economics and Statistics, in their publication 'Planning for Employment in Kerala' have projected the percentage of persons in labour force to be 31.84% in 1971 and 31.77% in 1976. The number of persons, computed by them came to 69,10,000 in 1971 and 77,58,000 in 1976 in the total population of 21,70,12,000 and 24,42,19,000 respectively.

As per 1961 Census, the males in the total labour force accounted for nearly 74%. In the rural Kerala, their percentage in the labour force was

69.13% and in urban areas it was 78.24%. The participation rate among the women has been rising, as it is evident from the figures in the foregoing statement on labour force in Table—2. This rise is more notable in the urban areas.

Age specific participation rates for rural and urban areas are separately available for the year 1961 and above are given in Table—3.

TABLE-3

*Age sex specific participation rate in the labour force in Kerala State as per 1961 census*

Age Group	Percentage of Persons in Labour Force in the Total Population									
	Rural			Urban			State as a whole			
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons	
0—14 .	2.31	1.98	2.15	2.45	1.83	2.15	2.33	1.96	2.15	
15—34 .	81.92	36.09	57.78	77.13	21.48	49.13	81.12	33.84	56.39	
35—59 .	95.63	39.56	67.63	93.32	25.01	59.89	95.26	37.33	66.42	
60 & above	67.98	15.53	40.80	52.77	10.40	29.86	65.88	14.77	39.23	
Age not Stated	61.95	30.51	46.73	73.97	29.17	57.14	62.37	30.48	47.04	
All ages	48.85	21.24	34.86	48.79	13.70	31.32	48.84	20.12	34.33	

However, the age-wise rates found by the Bureau of Economics in the survey of 1965 and also projections for 1971 and 1976 are given in Table—4.

TABLE-4

*Age specific participation rates in the year 1965 and projected rates for 1971 and 1976*

Age Group Years	Participation rate by Sex			Projected 1971	Percentage 1976
	Male	Female	Persons	Persons	Persons
0—14 .	1.30	1.43	1.36	1.00	0.80
15—19 .	42.00	25.45	33.39	30.00	25.00
20—24 .	83.37	33.90	57.15	57.15	57.15
25—29 .	94.34	33.12	61.90	61.90	61.90
30—34 .	95.46	34.45	63.70	63.70	63.70
35—39 .	95.90	35.06	64.22	64.22	64.22
40—59 .	92.02	31.34	62.50	62.50	62.50
60 & above .	43.01	10.21	26.34	26.34	26.34
All ages .	45.97	18.37	32.03	31.84	31.77

(Participation rate=percentage of the employed and unemployed in the population by age groups).

The projection given above is based on the assumption that the rates will be the same as in 1965 in all age groups excepting 0—14 and 15—19. In these age groups proportionately more and more persons would continue their studies as a result of the various programmes for expanding facilities for education. As against this, the Committee of Experts on Population Projections set up by the Planning Commission under the Chairmanship of the Registrar General, India, however, has predicted decline in the participation rates of the males only in the age group 15—34. They concluded that for urban females the rate will increase by 1.0 point between 1961—66 and by 2.0 points during every five years thereafter in the age group 15—34 and 1.0 point every 5 years in the age group 35—59. (Report of the Committee of Experts on Population Projection set up under the guidance of the Registrar General, India).

#### Unemployment :

The available data in respect of unemployment in Kerala State are given in Table—5.

TABLE-5  
*Extent of unemployment in Kerala State*

Survey	Percentage of unemployed Persons to						
	The Population	The Labour Force	Male Unemployed in Male Population	Male Unemployed in Male Labour Force	Female Unemployed in Females Population	Female Unemployed to Female Labour Force	Male among Unemployed
1961 Census	1·02	2·97	1·64	3·36	0·41	2·05	79·6
1965 Survey undertaken by State Statistical Bureau	2·9	9·1	3·3	7·1	2·6	13·9	54·5

The available NSS data on unemployment are given separately for rural and urban areas and have been discussed in the subsequent paragraphs.

The Census 1961 had found the number of unemployed persons as 1.7 lakhs in the total population of 169.0 lakhs and the total labour force of 58.0 lakhs persons. Among the unemployed, the number of males was 1.4 lakhs and the females was 0.3 lakh. 1.1 lakhs male and 0.3 lakh unemployed women were seeking work for the first time and constituted 86% of the unemployed persons.

Age-wise distribution of the unemployed persons as per 1961 Census is given in Table—6.

TABLE-6

*The distribution of unemployed by age group as per 1961 census*

Age Group	Percentage of Unemployed Persons		
	Male	Female	Persons
0—14 . . . . .	3·67	2·43	3·42
15—34 . . . . .	84·35	95·33	86·59
35—59 . . . . .	11·16	2·14	9·32
60+ . . . . .	0·80	0·09	0·66
Ages not stated . . . . .	0·02	0·01	0·01
Total . . . . .	100·00	100·00	100·00
No. of persons . . . . .	137,332	35,209	1,72,541

The above statement indicates that even in the age group 0—14 the number of job seekers was not insignificant.

The results of different surveys in the State estimated the number of unemployed persons; the data are shown in the Table—7.

TABLE-7

*Estimates in respect of unemployment in Kerala*

Survey Particulars/Reference Period	Number of Unemployed Persons (in lakhs)
*1. Year 1957 . . . . .	6·56
**2. 14th Round of NSS—1958-59 . . . . .	5·72
3. Year 1962 . . . . .	7·60
4. Sample Survey—1965 . .	
Persons . . . . .	5·47
Males . . . . .	3·04
Females . . . . .	2·43

*Source :* \*Planning for Employment, published by the Bureau of Economics & Statistics, Kerala.

\*\*NSS—14 Round (State Sample) — published by the Bureau of Economics & Statistics.

The estimates given in the Table—8 below have been made in respect of the unemployment at the beginning of 1971 and at the end of the Fourth Plan in the paper presented to the Committee on Unemployment by the Planning Department of the Government of Kerala. The estimates are based on the data presented by the above-said survey undertaken by the State Statistical Bureau in 1965. In the paper, three estimates have been presented in view of the probable variations in the estimates of the employment generated during the period 1966—71 and 1971—74.

TABLE-8

*Estimates of unemployment in Kerala in the year 1971 and 1974*

	Estimates of Unemployment (in lakhs)		
	Estimate No. 1	Estimate No. 2	Estimate No. 3
1. Unemployment at the end of 1960	5·47	5·47	5·47
2. Addition to labour force during 1961—71.	8·00	8·00	8·00
3. Employment generated during 1966—71.	4·40	4·44	4·12
4. Unemployment at the beginning of 1971.	9·07	9·03	9·35
5. Addition to labour force during 1971—74.	4·50	4·50	4·50
6. Employment likely to be generated during 1971—74.	..	2·90	2·23
7. Unemployment at the end of the Fourth Plan.	..	10·63	11·62

Assuming on the basis of the findings of the 1965 survey, that the actual unemployed registered with the employment exchanges formed 21 per cent of the total unemployed, the Committee on Unemployment in Kerala, too, arrived at the estimates of unemployed persons given in Table—9.

TABLE-9

*Estimates of Unemployment in Kerala*

Year	Live Registras (in lakhs)	Total Unemployed (in lakhs)
1965	1·42	5·47
1968	1·79	6·83
1970	2·39	9·06

*Source : Report of the Committee on Unemployment in Kerala.*

### Characteristics of the unemployed persons :

The survey conducted by the State Statistical Bureau gives the following details in respect of unemployed persons :

(1) Among the total unemployed of 5.5 lakhs, 2.5 lakhs (45.45%) were seeking employment and 3.0 lakhs (54.55%) were not seeking but available for employment. While the number of unemployed men in the two categories was almost equal, the percentage of women was higher in the second category, it being 60%.

(2) The age distribution of unemployed persons was as per Table—10.

TABLE-10

*Age-sex specific distribution of unemployed persons in Kerala (1965)*

Age Group Years	Percentage of Unemployed Persons		
	Male	Female	Persons
15—19 . .	35.17	34.03	34.67
20—24 . .	31.13	30.08	30.66
25—29 . .	13.00	11.19	12.20
30—34 . .	6.22	7.09	66.60
35—39 . .	4.29	6.43	5.24
40—59 . .	10.06	11.10	10.53
Wrong entries	0.13	0.08	0.10
TOTAL .	100.00	100.00	100.00

Age Groups 0—14 and 60 and above had not been considered for the classification of job seekers as unemployed persons in the Survey.

The table No. 10 indicates that 66.80% of the unemployed males and 64.11% of unemployed females were in the age group 15—24.

(3) The distribution of unemployed persons by educational level was as per Table No. 11 below :

TABLE-11

*Distribution of unemployed persons by educational level*

General Education	Percentage of Unemployed		
	Male	Female	Persons
1. Illiterate . . . .	10.30	27.30	17.88
2. Literate below Middle . .	43.17	32.89	38.61
3. Middle below Matric . .	19.51	13.93	17.03
4. Matric . . . .	25.45	24.79	25.16
5. Graduate . . . .	1.52	0.76	1.19
6. Post-graduate . . . .	0.05	0.23	0.13

It is interesting to find out that the unemployed females compared well with unemployed males in respect of general education. Among male, 320 persons had obtained degree in Agriculture and 190 in Engineering, 3640 diploma in Engineering, and 890 in Technology. Among females, 1960 had diploma in Engineering and 320 in Technology.

1961 Census presents somewhat different picture in respect of the technical degrees and diplomas. According to it only 78 unemployed women had some diploma or degree in technical subjects. Those having some technical degree were with the degree in teaching or other subject. In the field of medicine, there were only three women. In engineering and technology, no woman had qualified in any degree or post-graduate degree examination. Reports of the surveys conducted later by NSS are not yet available to throw further light on this aspect.

(4) By duration of unemployment, the report indicated the following distribution :

	General Education	Duration of One Year	Unemployment One Year & Above
(1)	Below Middle . . .	214600	9432
(2)	Middle below Matric . . .	40230	52920
(3)	Matric . . .	59390	78210
(4)	Graduate . . .	3690	2900
(5)	Post-graduate . . .	720	—
<b>TOTAL</b>		<b>318540</b>	<b>228350</b>
<b>Percentage</b>		<b>58.2</b>	<b>41.8</b>

The percentage of unemployed persons waiting for job for more than a year was very high.

(5) The percentage of unemployed persons utilised the services of employment exchange for seeking employment during 1965 is given in Table—12 below :

**TABLE-12**  
*Percentage of unemployed persons registered with employment exchanges in Kerala*

Region	Male	Female	Persons
Rural	18.69	11.60	15.62
Urban	42.70	35.60	39.27
<b>State</b>	<b>23.37</b>	<b>17.08</b>	<b>20.58</b>

(6) About 1.57 lakhs of unemployed men and 0.40 lakhs of unemployed women were willing to go outside Kerala. Fifty per cent of those women and about 33% of those men had passed matriculation or a higher examination. Nearly 94000 of those men and women were willing to go out of the State at their own expense.

It may be stated here that in 1961 Census, the number of out-migrants from Kerala was found to be about 6.18 lakhs including 4.02 lakhs men and 2.16 lakhs women. The survey of 1965 had found the number of out-migrants (to other parts of the country) as 5.28 lakhs and among them those who had left for work as 4.32 lakhs.

(7) The incidence of unemployment by Districts as per survey of 1965 is given in Table—13 below :

TABLE-13

*The incidence of Unemployment in the Districts of Kerala in 1965.*

Districts	The Unemployed Persons as Percentage of the Labour Force		
	Male	Female	Persons
1. Trivandrum . . .	10.32	24.76	14.73
2. Quilon . . .	7.11	17.93	10.14
3. Alleppey . . .	8.53	14.11	10.41
4. Kottayam . . .	5.69	9.97	6.80
5. Ernakulam . . .	7.07	12.07	8.35
6. Trichur . . .	8.22	18.31	11.98
7. Palghat . . .	5.40	9.74	6.98
8. Kozhikode . . .	8.41	10.91	8.96
9. Cannanore . . .	3.01	3.73	3.17

The above data indicate that intensity of the problem of unemployment was most serious in Trivandrum district, followed by the districts of Trichur, Alleppey and Quilon in the order. In Cannanore district the problem was not apparently serious at all. The problem is more serious among women. In all the districts the percentage in respect of women was higher than that of men. In Trivandrum district the percentage was as high as 24.76%.

## VI. Employment Exchange Data :

The number of the candidates on the live-register of employment exchanges in Kerala for the last six and a half years is given in Table—14.

TABLE-14

*Number of candidates on the live-register of employment exchanges and their placings*

Date of Account	No. of Candidates on the Live Register	Percentage distribution of graduates by general education							No. of Places during the Year	Percentage
		Below SSLC	SSLC	Pre-degree	Graduates	Post-Graduates	Total			
31-12-1966	1,57,156	45·14	50·44	1·86	2·23	0·28	100·00	16,904	10·86	
31-12-1967	1,79,479	48·39	46·59	1·98	2·69	0·35	100·00	15,617	8·08	
31-12-1968	1,93,776	47·96	46·18	2·01	3·42	0·43	100·00	15,658	8·08	
31-12-1969	2,39,586	40·14	51·72	2·85	4·59	0·70	100·00	17,864	7·00	
31-12-1970	2,93,754	39·25	51·50	2·54	6·03	0·68	100·00	17,939	6·5	
31-12-1971	3,57,381	43·74	46·96	2·85	5·83	0·62	100·00	16,537	4·60	
30-6-1972	3,87,366	41·18	49·74	3·04	5·57	0·47	100·00	N.A.	N.A.	

On 31-12-1971, the number of the candidates having professional and technical training was as follows :

(1) Graduates in Medicine . . . . .	= 405
(2) Graduates in Engineering . . . . .	= 2068
(3) Diploma holders in Engineering . . . . .	= 3450
(4) I.T.I. certificate holders . . . . .	= 9894
(5) Graduates in Agriculture . . . . .	= 128
(6) Graduates in Veterinary Science . . . . .	= 116

(Such figures for the registrants as on 30-6-72 are not available at present).

The above statement indicates that the number of job seekers seeking the help of employment exchanges has been rising constantly. During the year 1970-71 and 1971-72, the rise has been very sharp.

The Survey undertaken by the State Statistical Bureau in 1965 had discovered that among the registrants 18.6% were actually employed. The remaining were unemployed persons and they formed 45 per cent of the unemployed persons who were actually seeking work. The survey also indicated that the percentage of unemployed persons registering with employment exchange was nearly 21% in the State. The percentages for rural and urban areas have

already been quoted earlier. However, it does not appear reasonable to apply these rates in 1971 to find out the extent of unemployment through the figures on live-registers. It is necessary to conduct surveys periodically to assess the percentage of employed persons and unemployed persons registering themselves with the employment exchanges. It is also necessary to estimate these percentages by sex and level of education. It will be further essential to ensure that separate data regarding registration by the residents of rural and urban areas are available. However the lower percentage of placings corresponding to the number of applicants indicate the inadequacy of employment opportunities.

#### Rural Unemployment :

About rural unemployment the data is available from 1961 Census, the National Sample Survey report for the 16th Round (1960-61) and the report of the Survey conducted by the State Statistical Bureau in 1965. The extent of unemployment in the rural Kerala is given in Table No. 15.

TABLE-15

*Data regarding unemployment in rural areas of Kerala*

Particulars	1961 Census	1960-61 NSS-16th Round (State)	19th Rd. NSS (Central) 1964-65	Survey undertaken by State Statistical Bureau 1965
(1) Number of unemployed :				
(i) Persons . . .	1,27,634	N.A.	N.A.	N.A.
(ii) Male . . .	1,01,251	N.A.	N.A.	N.A.
(iii) Female . . .	2,62,383	N.A.	N.A.	N.A.
(2) Percentage of unemployed :				
(i) to all persons . . .	0·89	3·24	2·48	2·78
(ii) to male population	1·43	3·20	2·86	3·11
(iii) to female population . . .	0·36	3·29	2·14	2·46
(3) Percentage of males among unemployed .	79·33	49·66	54·35	N.A.
(4) Percentage of females among unemployed .	20·67	50·34	45·65	N.A.
(5) Percentage of unemployed to :				
(i) Total labour force	2·55	10·12	6·98	8·69
(ii) Male labour force	2·93	7·09	6·43	6·77
(iii) Female labour force	1·71	17·20	9·41	13·41

(NA = Not available)

The distribution of unemployed population by sex, age-group and general education and their percentage in the labour force is given in Table—16.

TABLE-16

*Distribution of unemployed persons by age-group and general education  
(16th Round of NSS 1960-61)*

Age-Group	Percentage Distribution by Educational Standard							Distribution by Age Group
	Ille- terate	Below Primary	Pri- mary	Middle	Matric & Above	Grad- uate		
<b>Males</b>								
0-11	.	.	..	..	..	..	..	..
12-14	.	.	10.20	10.30	..	..	..	6.63
15	.	.	5.6	8.82	..	..	..	3.87
16-26	.	.	38.89	30.61	60.30	72.73	84.62	54.14
27-46	.	.	16.66	34.70	10.29	27.27	15.38	20.99
47-61	.	.	27.78	16.32	7.35	..	..	9.95
62 & above	.	.	11.11	8.17	2.94	..	..	4.42
All ages	.	.	7.72	20.39	36.11	19.44	8.34	100.00
<b>Females</b>								
0-11	.	.	..	..	..	..	..	..
12-14	.	.	15.38	11.76	..	..	..	5.32
15	.	.	..	23.53	..	..	..	2.13
16-26	.	.	28.26	13.46	52.94	57.14	100.00	100.00
27-46	.	.	38.04	61.54	11.77	42.86	..	38.30
47-61	.	.	26.09	9.62	..	..	..	15.42
62 above	.	.	7.61	..	..	..	..	3.72
All ages	.	.	37 (50.68)	21 (28.77)	5 (6.85)	3 (4.11)	6 (8.22)	1 (1.37)
<b>Persons</b>								
0-11	.	.	..	..	..	..	..	..
12-14	.	.	12.87	10.59	..	..	..	5.96
15	.	.	0.91	..	11.76	..	..	2.98
16-26	.	.	30.01	21.78	58.80	70.00	93.33	100.00
27-46	.	.	34.54	48.52	10.59	30.00	6.67	29.81
47-61	.	.	26.36	12.87	5.88	..	..	12.74
62 & above	.	.	8.18	3.96	2.36	..	..	4.07
All ages	.	.	44 (30.34)	40 (27.59)	31 (21.38)	17 (11.72)	12 (8.28)	1 (0.69)

The above table indicates that majority of the unemployed persons were literate. Of the literates about 40% had not passed primary education and 31% had passed primary class. The percentage of these who had passed Round is given in Table—17.

The data of that round also indicate that none of the unemployed persons possessed any technical degree or qualification.

The incidence of unemployment in the rural areas as per NSS—16th Round is given in Table—17.

TABLE-17  
*Incidence of unemployment by age-group and sex*

Age-Group	Rate of Incidence (Percentage)		
	Male	Female	All Persons
0—11	..	..	..
12—15	21.84	18.67	20.37
16—17	34.56	21.43	29.20
18—21	20.87	21.77	21.21
22—26	6.12	16.98	9.00
27—36	4.54	17.93	8.72
37—46	1.72	9.80	3.99
47—56	1.93	19.64	6.11
57—61	9.48	17.95	11.61
62 above	9.41	31.82	14.10
TOTAL	7.09	17.20	10.12

The incidence of unemployment in Kerala was 10.12 in 1960—61 against the all India figure of 3.86%. The rate of incidence was much higher in the age groups 12-15, 16-17 and 18-21.

Similar data for later years are not available for rural area exclusively.

### VIII. Unemployment in Urban Areas of Kerala:

The extent of unemployment in the Urban areas of Kerala may be seen from the figures given in Table—18.

TABLE-18

*The extent of unemployment in the urban areas of Kerala State (1960-61 to 1966-67)*

	1961 Census	NSS-16th Round (State Sample) 1960-61	NSS-17th Round 1961-62	NSS-18th Round 1963-64	Survey by State Sta- tistical Bureau 1965	NSS-19th Round 1964-65	NSS-20th Round 1965-66	NSS-21 Round 1966-67
1. Number of unemployed								
(i) Persons	44,907	N.A.	N.A.	N.A.	..	N.A.	N.A.	..
(ii) Male	36,081	N.A.	N.A.	N.A.	..	N.A.	N.A.	..
(iii) Female	8,826	N.A.	N.A.	N.A.	..	N.A.	N.A.	..
2. Percentage of unemploy- eds.								
(i) To total popula- tion	1.76	2.46	2.15	1.98	4.16	1.87	1.62	1.75
(ii) To male popula- tion	2.81	2.86	3.15	2.70	4.74	2.40	2.23	1.32
(iii) To female popu- lation	0.69	2.14	1.61	1.28	3.56	1.36	0.95	1.16
3. Percentage of males among unemployed	80.35	54.35	74.29	66.67	N.A.	64.11	70.89	67.94
4. Percentage of females among unemployed	19.65	47.55	35.71	33.33	N.A.	35.89	29.11	32.46
5. Percentage of unem- ployed persons among :								
(i) total labour force	5.61	6.97	6.71	6.24	12.85	5.58	5.36	5.41
(ii) among male labour force	5.76	6.10	6.25	5.56	10.20	4.96	4.96	4.84
(iii) among female labour force	5.07	8.40	7.77	8.28	19.56	9.04	6.57	7.15

About the urban unemployment, the NSS 16th Round Report presents the following details :

(1) Percentage distribution of unemployed males, females and persons according to age group is given in Table—19.

TABLE-19

*Percentage distribution of unemployed persons in urban Kerala by sex and age*

Age Group in years		Male	Female	Persons
15—19	.	23.69	18.58	22.41
20—24	.	35.39	43.48	37.41
25—29	.	14.38	15.21	14.51
30—39	.	10.79	11.66	11.01
40—49	.	10.33	6.92	9.48
50—59	.	5.52	4.15	5.18
TOTAL	.	100.00	100.00	100.00

(2) The new entrants among the unemployed persons constitute 51.90 per cent. Among unemployed males their percentage is 51.69 and among females 52.54.

(3) 65.56% of the unemployed persons are unmarried.

(4) The distribution of unemployed persons by general education is as follows :

12.54% are illiterate.

58.79% are educated upto middle.

26.26% have passed school final or intermediate.

2.41% have passed a graduate or post-graduate degree examination.

(5) 84% of the unemployed persons had no training, 3.80% had obtained diploma or certificate or undergone apprenticeship in engineering. 5.18% had obtained certificate in typing, stenography, intermediate compilation and other office occupations.

(6) The job preference reported by unemployed persons indicated that 30.75% of them sought clerical and related works, 22.55% wanted employment as craftsmen, production process work, etc. and 11.70% agricultural works.

(7) 49.25% of the unemployed persons were seeking work for less than 12 months, 22.41% for 12 months of work but less than 23 months and 28.34% for 24 months or more.

In the absence of jobs 4.83% of the unemployed persons had taken to studies, 9.47% to house work and 4.49% to other activities, 80.53% were without any activity. The percentage of such persons was very high (88.04) among unemployed males. The Survey does not give by age-groups the incidence of unemployment.

*Underemployment :*

The Report of the 1965 Survey conducted by the State Statistical Survey throws some interesting light on underemployment prevailing in the State. The following is the distribution of the working population reporting availability for additional work is given in Table—20.

TABLE-20

*Distribution of unemployed persons by hours available for work*

Weekly Hrs. of Work	Percentage of Workers by Hours Worked			Percentage of Workers Available for Additional Work		
	Male	Female	All Persons	Male	Female	All Persons
0—14 . .	9.87	15.21	11.33	3.27	3.64	3.37
15—28 . .	16.48	21.71	17.91	8.82	11.00	9.42
29—42 . .	25.16	26.29	25.47	12.44	12.37	12.41
43—56 . .	29.85	26.09	28.82	5.09	4.05	4.81
57 & above . .	18.64	10.70	16.47	1.54	0.68	1.31
TOTAL . .	100.00	100.00	100.00	31.16	31.74	31.32

According to the above statement about 55% of the workers worked for less than 42 hours in the reference week. Out of them one-fifth worked for less than 15 hours and one-third for 15 to 28 hours. But the percentage of such workers who sought additional work among the total workers amounted to 25% only. Half of these were the workers who had worked for less than 28 hours during the week. The situation was worse among womenfolk. The report say that underemployment was most acute in Alleppey district where 42% of the workers worked for less than 42 hours in the reference week and reported availability for additional work. The next in order was Quilon district with 33.43% of the workers reporting underemployment.

In agriculture (excluding fishing) underemployment prevailed to a great extent. The Survey reveals that 65% of the workers worked for less than 43 hours and of them 37.6% had reported themselves available for additional work.

In the coir industry also, the extent of under-employment is about 50%. About 44% worked for less than 28 hours during the week.

Similarly, in handloom (cotton weaving) 44% of the workers worked less than 42 hours during the reference week.

In resume, it may be stated that in the absence of adequate data it is difficult to assess the exact magnitude of the problem. However, the trends evinced by the available data, sharp increase in the number of job-seekers on the live-register of the employment exchanges, and the nominal percentage of 'placings' correspondingly lead to the conclusion that unemployment in Kerala is quite acute. The declining percentage of workers among the total population from 42.88% as per 1931 Census to 33.31% in 1961 and 28.91% as per 1971 Census (according to the classification of population by major time disposition) also, bear evidence to this fact. The high incidence of unemployment among female population in the labour force is a peculiar feature in Kerala. Extensive under-employment among the workers is the other problem of the State. Besides, the data regarding inadequate hours of work, a very high percentage of rural as well as urban population (90.75% and 88.89% respectively) who cannot afford adequate in-take of the required calories in their daily diet, provide another positive proof of this fact. It may be added that these percentages were the highest in the country. As a result of this prevailing unemployment and under-employment, per capita income has been consistently lower than the all India figure. While the per capita income of India rose from Rs. 306.3 in 1960-61 to Rs. 329.9 in 1968-69, at constant prices, in Kerala it rose from Rs. 276.3 to Rs. 309.0.

#### **25th Round of National Sample Survey:**

In 1970-71 the NSS organisation conducted enquiry into the employment and unemployment situation in rural areas covering the weaker sections of population comprising the lowest ten per cent of the cultivator households and non-cultivating wage earner households. The estimated number of such households in rural Kerala was estimated to be 66,000 small cultivator households and 42,900 non-cultivating wage earner households. The available results have been discussed in the subsequent paragraphs.

##### *(i) Extent of participation in the labour force and incidence of unemployment.*

On the basis of the number of man-days spent during the reference week the estimated percentage of man-days of engagement in some gainful activity and man-days the members of the households sought work have been computed. On the basis of these computations, the participation rates and incidence of unemployment have been given in the Table—21.

TABLE-21

*Percentage of mandays of a week spent with gainful work, seeking work and percentage of the mandays of unemployment to the total of the days of these two categories—(25th Round NSS—Kerala State Sample)*

Age Group	Sex	At Work	Small Cultivator Households			At Work	Non-Cultivating wage earner households		
			With Work but or Available for Work not at all able for Work due to Rest, Leave etc.	Seeking Work in Labour Force (Col. 3+4+5)	Total mandays of the man-days		With Work but not at Work due to Leave, Rest etc.	Seeking Work but or Available for Employment (Col. 8+9+10)	Total Mandays in Labour Force (Col. No. 11)
1			2	3	4	5	6	7	8
0-9	M	1.5	1.4	0.3	3.2	9.4	..	2.6	..
	F	0.2	1.1	0.5	1.8	27.8	..	4.6	0.8
	P	0.9	1.3	0.4	2.6	15.4	..	3.6	0.2
10-14	M	5.6	2.1	2.7	10.4	26.0	2.8	5.3	3.1
	F	3.1	2.0	5.2	10.3	50.5	4.1	1.8	..
	P	4.2	2.1	4.0	10.3	38.8	3.3	3.8	1.8
15-44	M	57.5	8.8	18.1	84.4	21.4	59.9	8.0	21.3
	F	31.6	4.7	5.0	41.3	12.1	39.9	2.8	14.5
	P	42.9	6.5	10.7	60.1	17.8	49.7	5.3	17.8
									12

45-59	.	M	53.0	14.1	21.8	88.9	24.5	61.6	18.9	15.3	95.8	16.0
	F		27.2	9.6	8.6	45.4	19.0	40.3	..	11.0	51.3	21.4
	P		41.5	12.1	15.9	69.5	22.9	48.5	16.8	12.6	77.9	16.2
60 and above	.	M	38.6	35.1	9.2	82.9	11.1	36.4	36.4	..	72.8	..
	F		10.5	32.8	1.3	44.6	2.9	16.5	13.1	5.7	35.3	16.1
	P		28.4	33.8	4.9	62.1	7.9	24.8	22.8	3.3	50.9	6.5
TOTAL	.	M	31.6	7.9	10.5	50.0	21.0	32.4	7.9	10.8	51.1	21.1
	F		17.5	5.7	3.9	27.1	14.4	22.4	5.1	7.7	35.2	21.9
	P		24.8	6.8	7.1	38.2	18.3	27.1	6.5	9.2	42.8	16.1

Incidence of unemployment among women was more in the lower age groups in both the sets of households.

There was not much difference in the participation rates or extent of unemployment in the two sets of households.

(ii) *Earnings :*

The wage rates were higher for male as well as female workers belonging to the non-cultivating wage earner households, as indicated in the Table-22.

TABLE-22

*Average rate of earning per manday by employees of different sex engaged in agricultural and other occupation*

Household Type/Sex		Wages for Work on Farms	Wages for Non-farm Occupation	All Occupations
		Rs.	Rs.	Rs.
<b>1. Small cultivator households :</b>				
Male	.	3.40	3.89	3.57
Female	.	2.14	2.13	2.14
Persons	.	2.95	3.39	3.09
<b>2. Non-cultivating wage earner households :</b>				
Male	.	4.10	4.12	4.11
Female	.	2.24	2.19	2.23
Persons	.	2.64	3.69	3.03

(iii) Nearly 46 per cent of the small cultivator households and 34 per cent of non-cultivating wage earner households were willing to supplement their income by taking to dairying and poultrying. However, 66 per cent of the former and 70 per cent of the latter sets of the households needed financial assistance for doing so.

Nearly 22 per cent of the small cultivator households and 20 per cent of the non cultivating wage earner households reported knowledge of non-agricultural trades or occupations—majority in respect of spinning, weaving and manufacturing of bidi and other tobacco products. However, 92 per cent of such households of the former groups and 46 per cent of the latter group needed financial assistance for taking up non-agricultural trades/occupations.

(iv) 55.2% of small cultivator households and 73 per cent of non-cultivating wage earner households were having some persons willing to take up an alternative full time wage employment. Their distribution by location is given in the Table-23.

TABLE 23

*Percentage of households reporting willingness (of any member) to take up full-time employment by location preference and by household total net income*

Net Income in Rupees	Small Cultivator Households			Non-Cultivator Wage Earner Households			Total	
	Outside Village		Total	Outside Village		Total		
	Within Village of Residence	Without Guaranteed Employment		Within village of Residence	With Gu- aranteed Employment			
1. less than Rs. 299	.	1.4	0.6	0.4	2.4	..	2.8	
2. Rs. 300 to 599	.	1.4	0.8	0.1	2.3	..	2.8	
3. Rs. 600 to 999	.	5.9	5.6	5.2	16.7	10.2	1.9	
4. Rs. 1,000 to 1,999	.	12.7	10.4	2.8	25.9	9.3	32.4	
5. Rs. 2,000 to 2,999	.	2.0	3.9	0.6	6.5	1.8	5.6	
6. Rs. 3,000 & above	.	0.4	1.0	..	1.4	0.9	1.8	
<b>TOTAL</b>	.	23.8	22.3	9.1	55.2	22.2	47.3	
							<b>73.2</b>	
							<b>281</b>	

24,375 men and 6,525 women of the small cultivator household and 25,025 men and 5,525 women of the other group of households were willing to take up employment outside their village of residence. In the non-cultivating wage earner households 98 per cent persons (24,375 men and 5,525 women) opted for taking up employment on public works. The remaining persons preferred to have manual skilled job. In the small cultivator household, 28,275 persons (91.5%) were willing to take up employment on public works. Among the remaining 1,659 persons 225 opted clerical jobs, 300 non-clerical non-manual, 525 manual skilled and 600 unskilled workers.

### MADHYA PRADESH

Madhya Pradesh is one of the largest States in India. As per 1971 Census, its area was 444 thousand square kilometres and population 41.65 millions but its density was only 94 persons per square k.h. 83.7% of the population resided in rural areas and 16.3 per cent in urban areas. There were about 943 females per thousand males in the entire State while in rural areas, it was 958 and urban 869.

#### 2.0 Working Population :

During the course of the 1961 Census, the population was classified into two categories, i.e., working and non-working. In the case of regular work in any trade, profession, service, business or commerce if a person was employed during any of the fifteen days preceding the day of enumeration, he was classified as a worker. Further, a person who was working but was absent from his work during the fifteen days preceding the day on which enumerated or even exceeding the period of fifteen days due to the illness, travel, holiday, temporary break-down, strike or other causes, he was also classified as a worker. In the case of work of a seasonal nature, i.e., cultivation, livestock, dairying, household industry, etc., a person who had some regular work of more than one hour a day throughout the regular part of the working season was classified as a worker. Work included not only actual work but effective supervision and direction of work. Worker participation rates denote the percentage of workers to the total population. The workers' participation rates so derived from the data collected during the course of the 1961 Census are indicated in Table-1.

TABLE-1  
Participation rates in broad age groups, rural and urban, 1961

Age Group	Total			Rural			Urban		
	Persons	Males	Females	Persons	Males	Females	Per-Sons	Males	Females
1	2	3	4	5	6	7	8	9	10
0—14 .	11·28	11·76	10·77	12·75	13·26	12·22	2·21	2·73	1·64
15—34 .	81·13	93·14	68·62	86·21	95·73	76·54	53·19	80·01	20·80
35—59 .	85·72	97·70	72·48	88·67	98·21	78·41	66·86	94·74	30·43
15—59 .	82·94	94·97	70·11	87·19	96·74	77·27	58·18	85·50	24·22

	1	2	3	4	5	6	7	8	9	10
60 and above	56.34	80.52	36.01	58.79	83.23	38.67	39.80	63.72	16.78	
Age not stated	15.86	21.80	9.24	14.81	19.33	9.76	20.43	32.71	6.99	
TOTAL	52.30	60.21	43.99	55.19	61.58	48.60	34.94	52.44	14.50	

It would be of interest to note that the working force participation rate was highest in comparison with the rates for other States as well as the country as a whole (*i.e.*, 43%). The participation rate was highest mainly due to the higher participation of women in rural areas (*i.e.*, 12.22). The percentage of female workers to the total female population was 44 as compared to 28 for the country as a whole. The participation rate for male population was 60%.

The age wise distribution of the population as well as the working population is not yet available from the 1971 Census data.

### 2.1 Employed :

During the course of the urban labour force survey conducted in collaboration with the NSS Organisation, detailed information on the number of persons employed at work and persons employed, not at work were collected. As per definition, a worker was considered as *employed at work* if he or she had work on at least one day during seven days preceding the day of enquiry for salary, wages remuneration or profit in a gainful occupation or as unpaid worker in the household enterprise. A person was said to be *employed, not at work* if he or she was temporarily absent during the reference week for reasons such as illness, injury or other physical disabilities, bad weather, strike or lockout, paid vacation or *paid lay off*, for rest or recreation and other causes including social or religious necessitating absence from work. The percentage of persons at work and persons not at work observed during the 16th and 18th rounds of the urban labour force surveys were as in Table-2.

TABLE-I  
*Percentage distribution of population by labour force status*

Labour Force Status	16th Round			18th Round		
	M	F	P	M	F	P
<b>Employed</b>						
(i) at work.	25.89	6.89	32.75	45.76	8.01	27.86
(ii) not at work .	0.71	0.24	0.95	1.31	0.38	0.86
TOTAL .	26.60	7.10	33.70	47.07	8.39	28.72

*Source : 16th Round—July, '60—June, '61.*

*18th Round—Feb., '63—Jan., '64.*

## 2.2 Employment trends :-

The Directorate of Employment and Training has been compiling and publishing regularly every year an employment review based on the data collected under the provision of the employment exchanges "Compulsory Notification of Vacancies Act, 1959". The required information is collected from all the establishments in the public sector irrespective of their sizes and in the private sector from establishments employing 25 or more workers along with the information collected on voluntary basis from establishments employing 10 and above but less than 25 employees. The estimates so compiled have some inherent limitations, namely incomplete coverage, non-response, but over a period of time they indicate trend. The trend or the level of employment during the third plan period and the subsequent annual plans are given in Table-3.

In comparison to the last quarter of the Second Five Year Plan, the level of employment showed a rapid rise during each successive year of the Third Five Year Plan. Employment increased from 7.37 lakhs at the end of March, 1961 to 9.50 lakhs at the end of March, 1966 recording an increase of 29%.

## 2.3 Employment by industry and sex :

The increase in employment in the public sector was sharp as compared to the private sector. The increase in employment in the public sector was 33.97% as compared to 17.03% increase in employment in the private sector. The total employment in industry separately for public and private sectors during the Third Five Year Plan as well as the two annual plan periods was as given in Table-3.



TABLE-3

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Divi- sion	Industry	Sector	Total Employment at the End of March						Percent- age change over 1961 (1966/61)	Percent- age change over the pre- year (67/66)
			1961	1962	1963	1964	1965	1966		
0. Agriculture	Public	18,871	21,144	24,327	27,464	29,222	30,912	63·81	34,923	38,624 13·0 10·5
	Private	1,564	3,556	1,363	1,089	1,002	5,083	225·00	5,324	3,985 4·7 -25·1
1. Mining	Public	7,321	8,790	11,528	14,163	13,608	14,606	99·51	27,352	27,740 87·3 1·4
	Private	57,395	49,710	56,470	56,361	58,340	61,286	6·78	50,650	44,220 -17·4 -12·7
2 & 3 Manufacturing	Public	63,942	71,787	91,718	1,00,199	1,08,083	1,07,203	67·66	1,07,247	1,05,713
	Private	1,33,561	1,18,697	1,13,969	1,14,408	1,27,177	1,30,188	-2·52	1,22,959	1,25,203 -5·6
4. Construction	Public	42,452	47,804	49,891	48,356	42,354	40,297	-5·08	39,473	43,138 -2·4 9·2
	Private	7,534	13,218	20,034	21,863	20,328	18,560	146·35	17,274	10,166 -6·9 -41·2
5. Electricity	Public	12,345	7,047	8,259	9,925	12,271	13,154	6·55	14,391	15,474 9·4 7·5
	Private	704	866	921	1,514	1,898	1,259	78·88	1,117	745 -11·3 -33·3
6. Trade and Commerce	Public	2,311	4,555	5,417	6,208	6,769	7,436	221·76	8,441	9,729 13·5 15·3
	Private	3,589	3,972	4,951	5,116	6,266	10,321	187·57	11,280	11,909 9·3 5·5
7. Transport, Storage, etc.	Public	82,677	87,279	91,258	89,238	90,310	93,098	12·60	95,195	97,921 2·3 2·8
	Private	3,234	8,062	3,155	3,035	3,344	4,304	33·09	3,466	2,844 -24·3 -17·9
8. Other Services	Public	2,89,092	2,98,453	3,25,874	3,49,731	3,74,743	3,91,323	35·36	4,00,700	394,516 2·4 -1·5
	Private	8,104	7,685	8,512	11,200	12,484	21,416	1,64·26	22,385	22,538 4·5 0·7
9. Total	Public	5,21,011	5,40,859	6,08,272	6,45,284	6,77,360	6,98,029	33·97	7,27,722	7,32,855 4·3 0·8
	Private	2,15,685	2,00,766	2,09,336	2,14,586	2,30,839	2,52,433	17·03	2,34,455	2,21,610 -7·1 -5·5

#### **2.4 Working population :**

(a) *By industry*: As stated earlier detailed information in respect of the working population was collected during the course of the 1961 Census. The distribution of the working population by broad industrial groups separately for males and females were as in the Table-4.

TABLE - 4

*Percentage of working population as*

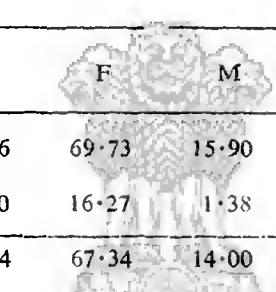
Total Workers (in lakhs)			Cultivator			Agr. Lab.		
P	M	F	P	M	F	P	M	F
169·29	99·81	69·48	62·68	59·44	67·34	16·63	14·00	20·41
(45·45)	(54·01)	(31·31)	(33·64)	(21·77)	(53·23)			
						Household Industry		
P	M	F	P	M	F	P	M	F
2·90	3·84	1·56	4·97	5·30	4·50			
(2·46)	(2·79)	(1·90)	(-)	(-)	(-)			
						Construction		
P	M	F	P	M	F	P	M	F
1·99	3·03	0·49	1·02	1·42	0·44			
(6·75)	(7·84)	(4·49)	(0·97)	(0·99)	(0·93)			
Trade and Commerce			Transport, Storage, etc.			Other Services		
P	M	F	P	M	F	P	M	F
2·38	3·51	0·77	0·93	1·54	0·06	6·49	7·92	4·43
(3·35)	(3·98)	(2·31)	(0·88)	(1·28)	(0·22)	(6·68)	(7·34)	(5·61)

(Figures in brackets indicate the percentage observed during the 1951 Census.)

The above table indicates that about 82% of the total workers were engaged in agriculture, live stock, forestry, fishing and hunting. It was significant to note that these branches of the economic activity taken together accounted for 62% of the total State income (at current prices, 1960-61). This also confirmed the belief that there was a heavy pressure of population on agriculture, animal husbandry and allied activities. An analysis of the sex composition of workers in different branches of economic activity revealed that it was the highest in agriculture, live-stock, forestry, fishing and hunting. Relatively a very small number of women were employed in the economic activities other than agricultural sector. The non-agricultural sector which employed relatively large number of women were manufacturing and services sectors.

(c) *By industry and residence status*: The distribution of the working population by industry, sex and residence status during 1961 was as in Table-5.

TABLE-5  
*Distribution of working population by industry and residence status*

	Cultivation		Agricultural Labour		Mining and Quarrying	
	M	F	M	F	M	F
Rural . . .	67.36	69.73	15.90	21.07	3.72	1.39
Urban . . .	6.90	16.27	1.38	6.14	4.70	5.23
<b>TOTAL . . .</b>	<b>59.44</b>	<b>67.34</b>	<b>14.00</b>	<b>20.41</b>	<b>3.84</b>	<b>1.56</b>
						
	Household Industry		Manufacturing		Construction	
Rural . . .	4.96	3.72	0.44	0.18	0.74	0.25
Urban . . .	7.55	21.32	20.21	7.11	5.97	4.34
<b>TOTAL . . .</b>	<b>5.30</b>	<b>4.50</b>	<b>3.03</b>	<b>0.49</b>	<b>1.42</b>	<b>0.44</b>
						
	Trade & Commerce		Transport and Storage etc.		Other Services	
Rural . . .	1.46	0.48	0.43	0.02	24.99	3.16
Urban . . .	17.05	6.96	8.92	0.93	27.32	31.80
<b>TOTAL . . .</b>	<b>3.51</b>	<b>0.77</b>	<b>1.54</b>	<b>0.06</b>	<b>7.92</b>	<b>4.43</b>

The percentage distribution of working population by work status in 1961 is indicated in Table-6.

TABLE-6

*Percentage distribution of working population by work status in 1961*

Work Status	Total			Rural		Urban	
	P	M	F	M	F	M	F
Employers . .	4·04	4·76	0·83	3·40	0·20	6·03	1·11
Employees . .	46·73	51·97	26·07	44·23	18·54	59·15	41·82
Single worker .	38·43	33·81	56·63	40·66	61·26	27·45	46·95
Family workers .	10·80	9·46	16·47	11·71	19·50	7·37	10·12
<b>TOTAL .</b>	<b>100·00</b>	<b>100·00</b>	<b>100·00</b>	<b>100·00</b>	<b>99·50</b>	<b>100·00</b>	<b>100·00</b>

The above table indicates that 47% of the total workers were employees i.e., wage-earning workers, 38% single workers, 10% family workers and 4% employers. The distribution of employees by branch of economic activity revealed that the largest number of them were employed in "services" sector followed by manufacturing sector.

#### Workers' Participation Rate :

The workers' participation rates as observed from 1961 Census were as follows:

	P	M	F
Rural . . . . .	55·19	61·58	48·60
Urban . . . . .	34·94	52·44	14·50
<b>TOTAL .</b>	<b>52·30</b>	<b>60·21</b>	<b>43·99</b>
	(49·31)*	(60·40)*	(37·83)*

\*Figures in bracket indicate the participation rates as observed in the 1951 Census.

The distribution of the working population by broad age groups was :

Age Group		Males	Females
0-14 . . . . .		8·00	9·95
15-34 . . . . .		50·38	51·14
35-59 . . . . .		35·46	34·20
60 + . . . . .		6·15	4·70
Age not stated . . . . .		0·01	0·01
TOTAL . . . . .		100·00	100·00

The above table indicates that a little more than 85% of the working population belonged to be age-group 15-59 years.

### 2.5 Urban unemployed :

During the course of the urban labour force surveys, the type and nature of the enterprise *i.e.*, establishments, undertaken services in which an employed person pursued his gainful activity was also recorded. The analysis of data collected in this regard is indicated below in Table-7.

TABLE-7

*Percentage distribution of employed persons by industrial group*

Industrial Group	16th Round		18th Round		
	P	M	F	P	
1. Agriculture, etc. . . . .	15·44	12·57	33·97	15·53	
2. Mining and quarrying . . . . .	..	0·46	0·24	0·43	
3. Manufacturing . . . . .	30·31	27·52	31·81	28·11	
4. Construction . . . . .	3·08	3·74	1·20	3·40	
5. Electricity, gas, etc. . . . .	0·17	0·96	2·63	1·20	
6. Trade and commerce . . . . .	18·48	18·47	5·50	16·66	
7. Transport, etc. . . . .	4·53	9·68	1·20	8·49	
8. Other services . . . . .	24·18	22·44	19·62	22·05	
9. Others . . . . .	0·72	3·20	3·35	3·23	
10 Not recorded . . . . .	3·14	0·96	0·48	0·90	
All Persons . . . . .	100·00	86·10	13·90	100·00	

Of the employed force manufacturing industry followed by services, commerce, and agriculture claimed the larger percentage. Amongst males larger percentage of the employed persons were engaged in manufacturing and services whereas amongst females larger percentage of the working force was engaged in agriculture including forestry, hunting and fishery followed by manufacturing enterprises.

### 3.0 *Labour force :*

Gainfully employed persons and unemployed persons between the ages of 15-59 years constitute the labour force. It provides a measure of the manpower available for productive work. It also provides the base for proper assessment of the employment and unemployment situation. The age composition of the labour force throws light on the problem on child labour and also it enables to forecast the extent of manpower at a future date. The sex-wise study of the labour force indicates the participation of women in economic activities while the general education, technical education, skill and similar characteristic of the labour force are indicative of the type and quality of manpower available. During the course of the 16th round of NSS undertaken from July, '60—June, '61 data on labour force component of the population were collected. The criteria adopted for classifying the individual as a working or a non-working person were as follows :

*Rural.*—A person who was directly or indirectly occupied in a type of work or with a job in an establishment on at least one day during the seven days preceding the date of enquiry, i.e., the reference week was treated 'working'. This participation in work need not always result in the production of goods and services.

A person having some work during the reference week but who did not actually perform it because of reasons, such as, illness, injury, vacation, holiday, festival, inclement weather, etc., was treated as 'working'.

If the person did not work because there was no work actually in the reference week for reasons like lack of demand, off season, etc., even though he had not severed his connection with the particular type of work or establishments and expects to work again at a future date the person was treated as 'not working but available for work or inactive according to his availability for work or otherwise.

*Urban.*—The test for classifying the person as 'working' was whether the person worked for at least one working day during the 7 days preceding the date of enquiry for salary, wages, remuneration or profit in a gainful occupation or as an unpaid worker in a household enterprise.

Other persons who were looking for full-time work during the preceding 7 days of the enquiry were treated as 'seeking and available for work'.

The persons in the age of 14 and below the age of 60 were only considered.

### 3.1 *Labour force by age groups :*

The percentage distribution of persons belonging to the labour force by sex, activity and residence status as observed from the 16th round of the NSS (July, 1960—June, 1961) is given in Tables-8 and 8(a).

TABLE-8

*Labour force distribution by sex, age*

Age group	R U R A L						U R B A N					
	Persons in Labour Force			Male Persons in Labour Force			Female Persons in Labour force			Persons in Labour Force		
	Emp.	Unemp.	Total	Emp.	Unemp.	Total	Emp.	Unemp.	Total	Emp.	Unemp.	Total
0-14 .	.	.	.	5.36	0.22	5.53	6.56	0.16	6.71	3.92	0.30	4.22
15-61 .	.	.	.	74.56	0.40	74.97	93.26	0.22	93.48	54.72	0.59	55.31
62 + .	.	.	.	22.36	..	22.36	35.92	..	35.82	11.88	..	11.88
Over all .	.	.	.	45.06	0.32	45.38	55.47	0.19	55.66	33.58	0.46	34.04
0-14 .	.	.	.	0.87	..	0.87	1.42	..	1.42	0.31	..	0.31
15-61 .	.	.	.	60.14	0.57	60.71	85.84	0.82	86.66	28.66	0.26	28.92
62 + .	.	.	.	35.48	..	35.48	58.97	..	58.97	10.89	..	10.89
Over all .	.	.	.	33.69	0.30	33.99	50.16	0.45	50.61	15.11	0.13	15.24

TABLE-8(a)

*Labour force by general education*

## R U R A L

General education	Total		Male		Female		Labour Force
	Employed	Unemp- loyed	Labour Force	Employed	Unemp- loyed	Labour Force	
1. Illiterate . . . . .	87.31	98.09	87.38	80.83	93.98	80.88	99.09
2. Literate but below matric.	12.11	1.91	12.04	18.27	6.11	18.22	0.91
3. Matric & above . . . . .	0.58	..	0.58	0.90	..	0.90	..
Total . . . . .	100.00	100.00	100.00	100.00	100.00	100.00	100.00
U R B A N							
1. Illiterate . . . . .	42.82	11.60	42.54	30.33	32.16	30.17	89.60
2. Literate but below matric .	47.56	51.59	47.60	57.48	64.23	57.54	10.40
3. Matric & above . . . . .	9.62	37.25	9.86	12.19	23.61	12.29	..
Total . . . . .	100.00	100.00	100.00	100.00	100.00	100.00	100.00

**3.3 Estimate of urban Unemployed :**

(a) On the basis of the data collected during the 16th round an attempt was made to estimate the magnitude of the labour force, employment, and unemployment in the urban areas. The relevant estimates obtained were as follows:

*Labour force by age*

Age Group	10—14	15—59	60+	Total	(in lakhs)	
					Employed	Unemployed
Males . . . . .	0·10	8·54	0·47	9·11	9·03	0·08
Females . . . . .	0·02	2·33	0·08	2·43	2·41	0·02
<b>TOTAL . . . . .</b>	<b>0·12</b>	<b>10·87</b>	<b>0·55</b>	<b>11·54</b>	<b>11·44</b>	<b>0·10</b>

(b) During the 18th and subsequent rounds of the NSS on urban labour force surveys, information on the labour force component of the population was collected. The concept of labour force, employed and unemployed, adopted were :

*Labour force.*—All persons who are employed, i.e., had claims to the job and also unemployed, i.e., were competing in the labour market during the reference period were treated to comprise the labour force.

*Employed at work.*—A person was considered as employed at work if he or she had worked on at least one day during the seven days preceding the date of enquiry for salary, wages, remuneration or profit in a gainful occupation or as unpaid worker in the household enterprise.

*Employed, not at work.*—A person was said to be employed, not at work, if he or she was temporarily absent during the reference week for reasons, such as illness, injury or some physical disabilities, bad weather, strike or lockout, or paid lay-off or paid vacation for rest or recreation or other causes including social and religious necessitating absence from work.

*Unemployed.*—An unemployed person was one who was not employed during the reference week and was looking for full-time work, provided his/her age was above 14 and below 60 years.

Urban labour force surveys conducted during the February, 1963—June, 1964 (18th round) revealed that 29% belonged to the labour force component of the population. The employed and unemployed respectively were 28.72% and 0.47%. Over 93% of those participating in the labour force were literate. It included 48.61% below matriculation, 9.60% matriculates but below graduation and 3.72% graduates. Amongst males about 70% were literate whereas amongst females only about 17% were literate. Details are indicated below in Tables-9 and 9(a) :

TABLE-9

*Percentage distribution of labour force by sex and age group*

Age Group (Years)		Males	Females	All Persons
		1	2	3
0—14 . . . . .		0·76	3·47	1·15
15—59 . . . . .		93·31	91·90	93·11
60 years and above . . . . .		5·93	4·63	5·74
TOTAL . . . . .		100·00	100·00	100·00
ALL PERSONS . . . . .		88·15	11·85	100·00

TABLE-9(a)

*Percentage distribution of Labour force by sex and educational standards*

Educational Standard	Males			Females	All Persons
	1	2	3	4	
Illiterate	.	30·18	82·64	37·58	
Literate but below matriculate	.	54·85	10·65	48·61	
Matriculate but below graduate	.	10·72	2·78	9·60	
Graduates	.	3·91	2·55	3·72	
N.R.	.	0·34	1·38	0·49	
<b>TOTAL</b>	.	100·00	100·00	100·00	
<b>ALL PERSONS</b>	.	88·15	11·85	100·00	

The above tables indicate that the labour force was comprised of about 88% males and about 12% females. Of those in the labour force, 1% were below 15 years of age, about 6% were of age 60 years and slightly over 93% were between 15 to 59 years of age. Amongst males, less than 1% were below 15 years of age whereas amongst females, 3.47% were of that age group.

About 62% of those in the labour force were literate. It comprised of 48.61% below matriculates, 9.60% matriculates and above and 3.72% graduates and above. Amongst males more than two-third were literate and or educated whereas amongst females participating in the labour force only 17% were educated.

#### 4.0 *Manpower situation :*

A peep into the type of vacancies that remained unfilled and the personnel available on the live register of employment exchanges will indicate the surpluses and/or shortages of manpower. The following table indicates the occupation-wise percentage of the vacancies remained unfilled. The data are produced in Table-10.

TABLE-10

*Percentage vacancies remained unfilled due to manpower shortage*

Year ending Occupation	Dec., 61	Dec., 62	Dec., 63	March, 65	March, 66	March, 67	March, 68
Professional & technical.	75.6	44.0	40.3	29.5	20.7	30.6	24.3
Administrative & executive.	3.4	5.9	5.5	1.2	1.5	2.3	2.7
Clerical & sales workers	. 3.7	17.3	13.1	11.3	10.8	8.9	7.1
Farmers & miners, etc.	. 8.4	2.6	5.3	8.1*	10.5*	9.7*	14.6*
Workers in trans. & communication occupation.	2.9	1.1	1.1	5.0**	4.2**	4.2**	2.3**
Craftsmen & production process workers	. . 0.7	4.3	25.5	13.0	9.1	7.5	6.6
Services	. . . . 5.3	24.8	9.2	31.9***	43.2***	36.9***	42.4***
TOTAL	. 100.00	100.00	100.00	100.00	100.00	100.00	100.00

*Source :* Annual Employment Market Reviews, Madhya Pradesh.

\*Other skilled workers.

\*\*Non-skilled workers.

\*\*\*Others.

The above table indicates that shortages existed mainly for professional and technical personnel, craftsmen and production process workers, clerical, sales workers as well as services, sports and recreation workers.

#### 5.0 Unemployment :

During the course of the 1961 Census an attempt was made to obtain the number of unemployed persons i.e., (i) seeking employment for first time and (ii) employed before but now out of employment and seeking work. The revealed figures are given in Table-11.

TABLE-11

*No. of persons unemployed aged 15 and above (in 000)*

Age group	Total Labour Force (in millions)			Fresh Entrants			Others			Unemployed		
	P	M	F	P	M	F	P	M	F	P	M	F
<b>U r b a n</b>												
15—34 .	1.63	0.89	0.74	7.72	7.45	0.27	6.21	6.01	0.20	13.93	13.46	0.4
35+ .	1.15	0.64	0.51	0.55	0.55	..	2.62	2.46	0.16	3.17	3.01	0.1
<b>TOTAL .</b>	<b>2.78</b>	<b>1.53</b>	<b>1.25</b>	<b>8.27</b>	<b>8.00</b>	<b>0.27</b>	<b>8.83</b>	<b>8.47</b>	<b>0.36</b>	<b>17.10</b>	<b>16.47</b>	<b>0.63</b>
<b>R u r a l</b>												
<b>TOTAL .</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>.</b>	<b>7.18</b>	<b>6.34</b>	<b>0.84</b>
5.1 Number of unemployed persons including persons below 15 years of age were :												
<i>Age distribution of unemployed persons—1961 Census</i>												
Age Group	No. of Unemployed Persons			Percentage								
0—14	1,105			4.35								
15—34	19,573			77.10								
35—59	4,062			16.00								
60—+	645			2.55								
All	25,385			100.00								

5.1A. The distribution of unemployed persons aged 15 and above by general education, sex and ages as observed from the 1961 Census is given in Table-12.

TABLE-12

*Unemployed persons, aged 15 & above by general education, sex and age 1961 census*

Sl. No.	Total		Fresh Entrants						Others						Total							
	Unemployed		Total		15—34		35+		Total		15—34		35+		M		F		M		F	
	P	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1.	17,103	16,472	631	48·6	42·8	45·3	34·2	3·3	8·6	51·4	57·0	36·5	32·3	14·8	24·7	81·8	66·3	18·2	33·5			
2.	3,982	3,636	346	33·7	31·2	33·2	20·2	5·5	11·0	61·3	68·8	39·1	29·5	22·2	39·3	72·3	49·7	27·7	50·3			
3.	6,351	6,270	81	44·1	49·4	19·2	37·0	24·9	12·4	55·9	50·6	38·3	34·6	17·6	16·0	57·5	71·6	42·5	28·4			
4.	3,819	3,744	75	52·2	64·0	50·3	38·7	1·9	5·3	47·8	36·0	87·8	29·3	10·0	6·7	88·1	88·0	11·9	12·0			
5.	2,562	2,468	94	65·7	57·4	64·3	55·3	1·4	2·1	34·3	42·6	28·3	40·4	6·0	2·2	92·6	95·7	7·4	4·3			
6.	33	29	4	69·0	50·0	69·0	50·0	0·0	0·0	31·0	50·0	20·7	50·0	10·3	0·0	89·7	100·0	10·3	0·0			
7.	4	3	1	33·3	..	33·0	..	0·3	..	66·7	100·0	66·7	..	0·0	100·0	99·7	..	0·3	100·0			
8.	296	276	20	73·6	70·0	71·0	70·0	2·6	0·0	26·4	30·0	18·8	30·0	7·6	0·0	89·8	100·0	10·2	0·0			
9.	56	46	10	63·0	40·0	63·0	40·0	0·0	0·0	37·0	60·0	30·4	60·0	6·6	0·0	93·4	100·0	6·6	0·0			

1. Total
2. Illiterate
3. Literate (without educational level)
4. Primary or Junior Basic
5. Matriculation or Higher Secondary
6. Technical diploma not equal to degree
7. Non-technical diploma not equal to degree
8. University degree or Post-Graduate degree other than technical degree
9. Technical degree or diploma equal to degree or Post-Graduate degree.

### 5.2 NSS estimates :

The National Sample Survey also collected similar data about labour force component of the population in rural and urban areas in the 16th round. The data revealed the following :

	Estimated Number of Unemployed		
	Rural	Urban	Total
Unemployed . . . . .	104,068	10,158	1,14,226

### 5.3 Educated unemployed :

The data collected on the educational qualification and technical training of the unemployed persons during the 16th round of the NSS are given in Table-13.

TABLE-13

*Percentage distribution of unemployed by educational qualification and training 16th round*

Education Standard	P	M	F	New Entrants	Other
				than New Entrants	
Illiterate . . . . .	11·17	12·16	7·40	4·06	20·65
Literate but below matric	51·58	64·21	3·70	68·65	28·84
Matric but below graduate	35·15	20·97	88·90	23·60	50·51
Graduate & above . . .	2·10	2·66	..	3·69	..
N. R. . . . .	..	..	..	..	..
<b>TOTAL . . . . .</b>	<b>100·00</b>	<b>100·00</b>	<b>100·00</b>	<b>100·00</b>	<b>100·00</b>

Further analysis revealed that among unemployed 57.18% were new entrants to the employment market. From amongst these new entrants 93.61% had no training of any sort though all with the exception of 4.06% were literate some of them had even matriculation certificates and above. Similar data collected during the course of the urban labour force—18th round of the National Sample Survey are given in Table-14.

TABLE-14

*Percentage distribution of unemployed by educational standard-18th round*

Educational Standard	P	M	F
Illiterate . . . . .	29·41	27·03	35·71
Literate but below secondary . . . . .	43·13	51·35	21·44
Secondary but below graduate . . . . .	23·54	21·62	28·58
Graduate . . . . .	3·92	..	14·27
<b>TOTAL . . . . .</b>	<b>100·00</b>	<b>100·00</b>	<b>100·00</b>

The table above shows that among unemployed 4% were graduates, 43% literate but below secondary and 29% illiterate. Amongst males more than half of the unemployed were literate but below secondary standard. Over one-fourth were illiterate and about one-sixth were with secondary standard. Amongst females, more than one-third of the unemployed were illiterate, over one-fifth below secondary, the same number with secondary qualification and 14.27% graduates.

#### 5.4 Educated unemployed from employment exchanges :

The employment exchanges data continue to be one of the main source of information about the behaviour of unemployment trends in the urban sectors. Despite well-known limitations, they indicate certain broad trends in the urban unemployment. The number of educated persons on the live register of the employment exchanges during December, 1960 to December, 1971 are given in Table-15.

TABLE-15

*The number of educated persons on the live register of the employment exchanges by level education*

Period Ending Dec.	Number on the Live Registers	Percentage on the Live Registers	Percentage of Unemployed as		
			Total	Matri-culate	Inter-mediate
1960 . . . .	14,347	N.A.	78.7	12.0	9.3
61 . . . .	17,428	23.2	79.8	12.1	8.1
62 . . . .	28,750	23.4	67.9	20.3	11.8
63 . . . .	36,053	24.4	52.1	36.9	11.0
64 . . . .	45,502	31.1	35.8	52.7	11.5
65 . . . .	59,123	36.5	27.9	61.1	10.0
66 . . . .	68,567	38.4	15.3	73.6	11.1
67 . . . .	84,899	46.5	18.8	69.5	11.6

The above table reveals that the number of educated unemployed had been increasing over the years. The proportion of intermediates and graduates among the educated unemployed had also been increasing. The increase in the case of intermediate class was rapid. At the end of Third Five Year Plan out of total live registerants, 36.5% of the applicants were educated. In comparison to the year 1961 the numerical increase was more than three-fold, it increased from 17,428 as on 31-12-61 to 59,123 as on 31st December, 1965.

### 5.5 Duration of unemployment :

The data collected regarding the duration of unemployment of unemployed persons during the 16th round of National Sample Survey revealed that more than one-third, i.e., 37.68% of the persons had been waiting for employment opportunities for a period of 1 to 2 years while 31.49% of the unemployed persons were waiting for a period of 6 to 11 months. Those looking for jobs for a period of two years or more were 11.94%. The relevant figures are given in Table-16.

TABLE-16

*Percentage distribution of unemployed persons by sex and duration of unemployment*

Duration of Unemployment (months)	16th Round			Duration of Unemployment (months)			18th Round		
	P	M	F	0—1	2—3	4—6	7—9	10—12	13—18
0 . . .	0.77	0.98	..	0—1	..	..	25.49	29.73	14.29
1 . . .	6.75	8.52	..	2—3	..	..	5.88	5.40	7.14
2 . . .	3.87	2.93	7.40	4—6	..	..	29.41	35.14	14.29
3—5 . . .	7.52	9.50	..	7—9	..	..	..	..	..
6—11 . . .	31.49	16.34	88.90	10—12	..	..	11.76	8.11	21.43
12—23 . . .	37.66	47.61	..	13—18	..	..	3.92	5.40	..
24 & above . . .	11.94	14.12	3.70	19—24	..	..	..	..	..
				25+.	..	..	17.65	13.52	28.56
				N. R.	..	..	5.89	2.70	14.29
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Further analysis revealed that more than half, i.e., 52.28% of the employed had no other engagement but were waiting for job opportunities, 23.20% were pursuing studies and 19.38% kept themselves busy with other non-gainful activities. Amongst males unemployed 63.13% had not activity and 29.23% were engaged in studies.

The 18th Round of the urban labour force survey revealed that over 3/5th of the unemployed were looking for jobs for a period of 6 months and less. About 1/4th were looking for jobs for about a month and over 29% for a period of 4 to 6 months. Those looking for jobs for more than two years were 17.65% and for a period of 10 to 12 months were 11.76%. Amongst males 35.14% were in

employment market for a period of 4 to 6 months and about 30% for about a month. Amongst females 28.56% were looking for jobs for a period of more than 2 years and over 1/5th for a period of 10 to 12 months.

### 5.6 Unemployed by ages :

Urban labour force survey-16th Round revealed that a major percentage, i.e., 41.89 of the unemployed aged 15 and above were in the age group 20-24 years followed by age-group 30-39 years (24.53%). Further, 52.94% of males unemployed belonged to the age group 20-24 years while most of the unemployed females were within age group 30-39 years. The relevant details are given in Table-17.

TABLE-17  
*Percentage distribution of unemployed persons by age*

Age Group	16th Round			18th Round		
	P	M	F	P	M	F
15—19 . .	19.88	24.15	3.70	9.80	8.11	14.28
20—24 . .	41.89	52.94	..	27.46	32.43	14.28
25—29 . .	7.73	8.79	3.70	25.49	18.92	42.86
30—39 . .	24.53	6.57	92.60	15.68	13.51	21.44
40—49 . .	2.88	3.64	..	13.73	16.22	7.14
50—59 . .	3.09	3.91	..	5.88	8.11	..

The 18th Round of the urban labour force survey indicated that about 27.46% of the unemployed were in age group of 20-24 years followed by 25.49% in the age group 25-29 years. About 6% were in the age group 50-59 years. Amongst males about 1/3rd were in the age group 20-24 years whereas amongst females more than 2/5th were in the age group 25-29 years. None of the females in the age group 50-59 years were reported to be unemployed whereas in the corresponding age group amongst male 8.11% were unemployed. .

### 5.7 Unemployed by duration of unemployment an educational standard :

The data collected in respect of the unemployed persons during the 16th round of urban labour force survey with regard to the duration of unemployment and educational standard revealed that most of those waiting for a period of 6 to 11 months were matriculates and above but below graduates. While most of those waiting for a period of 12 to 23 months were below matriculation. The details are given in Table-18.

TABLE-18

*Percentage distribution of unemployed persons by educational standard and duration of unemployment*

Educational Standard	Duration of Unemployment (months)									Total
	0	1	2	3—5	6—11	12—23	24 & above	8	9	
i	2	3	4	5	6	7	8	9		
Illiterate . . . . .	..	3.09	0.77	0.77	..	1.55	4.99	11.17		
Literate but below matriculate . . . . .	0.77	1.55	2.09	3.09	7.72	29.95	5.41	51.58		
Matriculate but below graduate . . . . .	..	2.10	..	1.55	23.77	6.18	1.55	35.15		
Graduate and above . . . . .	..	..	..	2.10	..	..	..	2.10		
Unrecorded . . . . .	..	..	..	..	..	..	..	..		
<b>TOTAL</b>	<b>. 0.77</b>	<b>6.74</b>	<b>3.86</b>	<b>7.51</b>	<b>31.49</b>	<b>37.68</b>	<b>11.95</b>	<b>100.00</b>		

#### *Underemployment :*

Underemployment, as customarily defined, is the state of employment which "exists when persons in employment who have not full-time work be able and willing to do more work than they are actually performing, or when the increase in productivity of persons in employment would be raised if they worked under improved condition of production or transferred to another occupation, account being taken of their occupational skills". Thus underemployment can be visible or invisible. Visible underemployment includes persons working less than normal period of work and available for additional work. Invisible underemployment includes persons whose working time is not abnormally reduced but whose earnings are abnormally low or jobs do not permit full use of their capacities or skills or employed in establishments whose productivity is abnormally low. Thus the measurement of visible underemployment would inter-alia require information on both the number of days and hours worked during the reference week. This information in conjunction with information on the number of persons available for additional work would help to measure the volume of visible underemployment.

#### *Estimates of underemployment—Rural :*

The data collected regarding the gainfully occupied persons in rural areas by weekly hours of work during the 16th Round of the NSS revealed that about 14% of the rural gainfully occupied persons had work for less than 30 hours a

**week** and another 11% between 31-40 hours. It would not be unrealistic to assume that bulk of the persons in this group would be available for additional work and for such persons as may not be available for additional work in this group should be equalised to persons with more than 30 hours of work and reporting availability for additional work. The rural working population in 1961 was 153.12 lakhs and the proportion of gainfully employed persons working less than 30 hours per week as partially employed the estimates of underemployed available for additional work would be 21.35 lakhs.

Similarly, the data collected regarding the gainfully occupied persons by number of days at work during the course of the 16th Round of the NSS revealed that 14.3% of the total working population was at work for five days and less. Taking these to be partially employed, the number of under-employed persons in the rural areas comes to about 21.90 lakhs. Averaging the two estimates, the number of underemployed persons in the rural areas of the State during the 1961 could be placed at 21.62 lakhs. This estimate, by and large, compares favourably well to the volume of underemployment in the country as a whole. Underemployment in the country as a whole at the beginning of the Third Plan period was estimated to be of the order of 150-180 lakhs.

#### *25th round of NSS :*

25th Round of the NSS was canvassed primarily to study the economic condition of the weaker sections of the rural population. The population considered and covered was households (i) having no cultivated land *i.e.* non-cultivator wage earner households and (ii) the lowest 10% of households having cultivated land *i.e.* small cultivator households. The study was spread over 8,184 villages for the Central sample and 8,136 villages for the State sample. The results reproduced below relate to the State sample pooled over all the sub-samples.

#### *Employment and unemployment :*

The percentage distribution of the estimated number of man-days spent per week under different type of economic and other activities by persons belonging to various age, sex and class of persons is given in the Table-19.

TABLE-19

*Percentage of distribution of estimated number of man-days spent per week under different types of economic and other activities by persons belonging to various age-sex group*

	1	2	3	4	5	6	7	8	9	10	11	12	13
	(Females)												
1. Worked in farm	.	0·9	19·7	48·0	43·0	24·3	27·8	0·7	19·2	55·5	50·1	24·3	33·2
2. Worked in non-farm occupation	.	0·3	4·0	8·2	10·3	2·1	5·0	..	2·9	11·3	7·7	1·9	6·1
3. Did not do any gainful work other than (i) and (ii)	98·1	73·7	39·6	37·8	64·0	63·6	98·4	76·6	29·5	34·3	58·6	57·0	
(i) Seeking and/or available & or work	0·1	1·9	1·3	0·6	0·5	0·8	..	0·1	1·4	3·9	2·8	1·2	
(ii) Not available for work due to illness, injury, etc.	0·6	0·7	2·9	7·4	9·1	2·8	0·9	1·2	2·3	4·0	12·4	2·5	
TOTAL	.	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00
	(Persons)												
1. Worked in farm	.	0·9	25·0	63·0	60·1	36·1	36·6	0·7	21·9	67·7	63·4	36·4	39·8
2. Worked in non-farm occupation	.	0·1	4·1	10·0	9·9	5·5	5·8	0·1	4·2	11·5	9·0	4·6	6·6
3. Did not do any gainful work other than (i) and (ii)	98·3	69·1	22·3	22·9	48·3	54·0	98·0	72·7	17·5	19·5	42·9	50·0	
(i) Seeking and/or available for work	0·0	1·0	1·5	1·2	0·8	0·9	..	0·4	1·5	3·5	4·6	1·3	
(ii) Not available for work due to illness, injury, etc.	0·7	0·8	3·2	5·9	9·3	2·7	1·2	0·8	1·8	4·6	11·5	2·3	
TOTAL	.	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00	100·00

The table shows that the percentage of man-days available and/or seeking work was more i.e. 1.3—1.4 for males and 1.2 for females in the case of non-cultivator wage earner households than the small cultivator households percentage of 0.9—0.9 for males and 0.8 for females. The breakup of the percentage of man-days available and/or seeking work by age-group in the case of non-cultivator wage earner households was 0.4 per person aged 10-14 years 1.5% for 15-44 years, 3.5% for 45-59 years and 4.6% for 60 and above years. The corresponding percentages in the case of males and females were 0.5 and 0.1, 1.7 and 1.4, 3.2 and 3.9 and 7.1 and 2.8 for persons aged 10-14 years, 15-44 years, 45-59 years and 60 and above years respectively. Similarly, the breakup of the percentage of man-and 3.9 and 7.1 and 2.8 for persons aged 10-14 years, 15-44 years, 45-59 years and age groups were 0.0 for persons aged upto 9 years, 1.0 for 10-14 years, 1.5 for 15-45 years, 1.2 for 45-59 years and 0.8 for persons 60 and above years. The corresponding breakup for males and females were, 0.0 and 0.1; 0.4 and 1.9; 1.6 and 1.3; 1.7 and 0.6, and 1.1 and 0.5 for persons aged upto 9 years; 10-14 years, 15-45 years, 45-59 years and 60 and above years respectively. Similarly, the proportion of estimated number of man-days spent/worked in other farms for salary and wages was more i.e. 39.1-44.9 for males and 32.8% for females—in the case of non-cultivator wage earner households than the percentage of 27.5-32.1 for males and 22.6 for females—in the case of small cultivator households.

#### *Earning :*

Average rate of earnings per man-day by employees of different sex, age and class of persons engaged in agriculture and other occupations is given in Table-20.

TABLE-20

#### *Average of earnings per manday by employees of Different sex—agegroup engaged in agricultural and other occupations*

Age-Group in Years	Small Cultivator Households			Non-Cultivating Wage-Earner Households		
	Average earnings per Man-day in Rupees			Average Earnings per Man-day in Rupees		
	For Those who Worked in other Farms for Salary or Wages	For Those who worked in Non-farm Occupation as Non-self Employed	For all Non-self employment	For Those who Worked in other Farms for Salary occupation or Wages	For Those who Worked in Non-farm Employment as Non-self Employed	For all Employment
1	2	3	4	5	6	7
		Males			Males	
1. 0—9 . . .	1.10	..	1.10	1.21	..	1.21
2. 10—14 . . .	0.99	1.07	1.00	1.18	1.30	1.20
3. 15—44 . . .	1.79	2.09	1.82	1.68	2.41	1.76
4. 45—59 . . .	1.63	1.52	1.62	1.67	2.31	1.73
5. 60 & above . . .	1.38	2.57	1.51	1.54	1.44	1.53
TOTAL . . .	1.69	1.94	1.71	1.64	2.30	1.71

1	2	3	4	5	6	7
	<i>Females</i>			<i>Females</i>		
1. 0—9 . . .	1.00	1.05	1.03	0.98	..	0.9
2. 10—14 . . .	1.02	0.90	1.00	1.09	0.96	1.08
3. 15—44 . . .	1.36	1.28	1.35	1.34	1.44	1.35
4. 45—59 . . .	1.36	1.27	1.35	1.30	1.27	1.29
5. 60 & above . .	1.32	0.50	1.30	1.43	1.00	1.43
<b>TOTAL .</b>	<b>1.34</b>	<b>1.24</b>	<b>1.33</b>	<b>1.32</b>	<b>1.39</b>	<b>1.32</b>
	<i>Persons</i>			<i>Persons</i>		
1. 0—9 . . .	1.05	1.05	1.05	1.10	..	1.10
2. 10—14 . . .	1.00	1.01	1.00	1.15	1.22	1.15
3. 15—44 . . .	1.62	1.80	1.63	1.54	2.08	1.60
4. 45—59 . . .	1.53	1.38	1.51	1.52	1.94	1.55
5. 60 & above . .	1.35	2.32	1.43	1.50	1.45	1.49
<b>TOTAL .</b>	<b>1.55</b>	<b>1.65</b>	<b>1.56</b>	<b>1.51</b>	<b>1.99</b>	<b>1.56</b>

*Source :* N.S.S. 25th Round—Madhya Pradesh.

The table shows that though the average earnings of all non-self-employed per man-day worked were almost the same in both the strata *i.e.* small cultivator households and non-cultivator wage earner households it varied appreciably in regard to the class of persons engaged in farm occupation for salary or wages and in non-farm occupation as non-self-employed. The average earnings for those who worked in non-farm occupation as non-self-employed were more *i.e.* Rs. 1.99—Rs. 2.30 for males and Rs. 1.39 for females—in the case of non-cultivator wage earner households than that of Rs. 1.65—Rs. 1.94 for males and Rs. 1.24 for females in the case of small cultivator households. Persons aged 15—44 years had the highest average earnings per manday worked in both the strata. Similarly, the average earnings per manday worked were more for males than the females in respect of each age group in both the strata.

### MAHARASHTRA

The area of the State is 308,000 square kilometres and population according to 1971 Census, 50.34 millions. The density of population per square kilometre was 164 persons. 68.8% of the people resided in the rural areas and 31.2% in urban areas. There were about 932 females per 1,000 males in the State while in the rural areas the sex ratio was 988 and in urban areas it was 820.

#### *Working population :*

The workers' participation rates and the percentage distribution of workers according to occupation derived from 1971 Census so far available are given in Table-1.

TABLE-I  
*Percentage distribution of workers' according to occupations-1971 census*

Census Year	Workers as Per Cent of Total Population	Percentage Cultivators						Distribution of Workers as Agricultural Labourers						Other Workers		
		P			M			F			P			M		
		P	M	F	P	M	F	P	M	F	P	M	F	P	M	F
1971	T	37.21	51.87	21.49	35.09	36.17	32.27	28.98	21.49	48.40	35.93	42.34	19.33			
	R	39.60	52.49	26.56	46.66	51.80	36.36	37.52	29.90	52.78	15.82	18.30	110.86			
	U	31.95	50.62	9.16	3.46	3.47	3.40	5.64	3.89	17.47	90.90	92.64	79.33			

*Employment generation under rural works projects :*

The Directorate of Employment, Government of Maharashtra has been conducting regularly every year employment surveys to estimate, to the extent possible, employment generated under those blocks where rural works projects are in operation. The workers participation rates derived from these surveys during the different years are indicated below :

*Workers participation rates in rural works programme villages*

		1961	1963-64	1964-65	1966
Bombay	.	49.85	..	47.18	49.96
Poona	.	48.22	..	49.03	48.21
Aurangabad	.	47.16	..	50.34	46.83
Nagpur	.	54.30	..	54.01	54.31
<b>TOTAL</b>	.	<b>49.73</b>	<b>53.17</b>	<b>50.20</b>	<b>49.68</b>

*Source : Employment Generation under Community Development and Rural Works Projects.*

The labour force participation rates by sex and educational standard derived from 1961 Census as well as urban labour force survey (13th & 16th rounds of the NSS) are given in the Table Nos. 2, 3, 4 & 5.

TABLE-2

*Labour force participation rates by age-group 1961 census*

Age Group	Total			Rural			Urban		
	Males	Females	Total	Males	Females	Total	Males	Females	Total
0-14	8.77	8.65	38.18	11.05	10.71	11.41	2.18	2.80	1.51
15-34	75.55	89.37	8.89	85.24	93.44	77.53	55.24	82.16	18.99
35-59	82.06	97.56	60.98	87.19	98.39	75.26	68.94	95.74	28.72
60+	49.52	73.53	63.90	52.79	78.20	28.92	37.50	58.33	16.6
Total	48.37	57.90	26.41	52.55	58.33	46.75	37.72	56.93	13.71

TABLE-3

*Labour force rates by age-group—13 round urban*

	Males			Females			Total		
	Greater Bombay	Other Urban Areas	State	Greater Bombay	Other Urban Areas	State	Greater Bombay	Other Urban Areas	State
0—15 .	2·77	3·98	3·67	0·32	2·21	1·75	1·61	3·12	2·75
16—17 .	29·83	40·33	37·73	4·15	20·77	15·52	15·72	31·21	26·85
18—21 .	72·49	68·24	69·69	9·42	20·34	17·15	44·97	44·97	44·71
22—26 .	95·10	94·94	95·01	10·59	20·81	17·65	62·09	56·26	58·44
27—36 .	98·73	97·94	98·25	15·73	22·31	20·51	69·74	61·83	64·52
37—46 .	99·16	96·66	97·63	19·31	32·52	28·98	71·52	66·22	68·00
47—56 .	93·49	87·66	89·67	12·16	24·81	21·68	64·44	58·19	60·08
57—61 .	60·59	69·13	66·52	10·44	14·28	13·67	42·45	38·04	39·06
16—61 .	90·87	87·05	83·48	12·94	23·30	20·43	61·26	55·87	57·66
62 & above	36·72	39·38	38·71	7·53	5·05	5·55	23·04	20·93	21·41
TOTAL .	62·50	49·28	53·55	7·88	13·55	12·08	39·94	31·81	34·20

TABLE-4

*Distribution of labour force according to age-groups—16 round urban  
(1960-61)*

Age Group (in years)		Males	Females	Total
1. 0—9 .	.	0·08	0·54	0·17
2. 10—14 .	.	1·30	4·57	1·91
3. 15—24 .	.	22·45	25·49	23·02
4. 25—49 .	.	61·34	58·06	60·73
5. 50—59 .	.	10·73	9·79	10·35
6. 60 & above .	.	4·10	1·55	3·82
		100·00	100·00	100·00

TABLE-5

*Labour force participation rates by educational standard—13 round—urban*

General Educational Standard	Males			Females			Persons		
	Greater urban		State	Greater Urban		State	Greater Urban		State
	Bombay	Areas		Bombay	Areas		Bombay	Areas	
1. Illiterate . . .	54·15	36·05	41·18	9·34	16·32	14·89	31·19	23·86	25·59
2. Literate but below matric . . .	65·07	55·77	58·95	4·27	6·45	5·70	43·47	38·38	40·13
3. Matric & above . . .	78·29	79·61	79·10	28·91	35·08	31·42	65·56	73·80	70·31
7. Not recorded . . .	100·00	100·00	..	..	..	..	66·67	66·67	
TOTAL . . .	62·50	49·28	53·55	7·88	13·55	12·08	39·94	31·81	34·29
Sampled Persons . . .	5,392	5,402	10,794	3,807	5,123	8,930	9,199	10,525	19,724

*Gainful Employment :*

The industrial distribution of the working force shows a distinct shift away from agriculture towards manufacturing and services. The relevant statistics are reproduced in Table-6.

TABLE-6

*Trends in the industrial distribution of the working force (percentages) 1911-1961 by broad sectors of economy*

State	Industry Group	Years				
		1911	1921	1931	1951	1961
Maharashtra . . .	A	70·7	69·4	70·0	63·3	64·5
	M	10·4	10·3	10·4	13·8	14·4
	S	17·2	18·4	17·5	20·4	19·5

**NOTE :**

A : Agriculture including allied activities.

M : Manufacturing.

S : Services, i.e., and commerce, storage, transport, etc., and commerce storage.

Similar data collected and analysed during the 13th & 16th urban labour force surveys of NSS are given in the Table-7.

TABLE-7

*Percentage distribution of gainfully employed persons in urban areas by industry groups  
13th round*

Industry Groups	Males			Females			Persons			16th Round			
	Greater Bombay	Other Urban Areas	State Bombay	Greater Bombay	Other Urban Areas	State Bombay	Greater Bombay	Other Urban Areas	State Bombay	Males	Females	Persons	
	1	2	3	4	5	6	7	8	9	10	11	12	13
Agricultural, live stock fishing etc.	1.08	22.27	14.29	4.32	42.22	35.75	1.32	26.25	17.67	13.56	38.46	17.73	
Mining and quarrying	0.09	0.15	0.13	0.36	..	0.06	0.11	0.12	0.12	0.66	..	0.55	
Manufacturing	45.65	25.79	33.27	35.61	31.41	32.13	44.87	27.91	33.08	33.38	27.45	32.39	
Construction	1.55	2.27	2.00	2.88	0.82	1.17	1.66	1.98	1.87	2.72	1.23	2.47	
Electricity, gas, water and sanitation.	0.34	0.72	0.57	12.22	5.33	6.51	0.30	0.58	0.48	0.35	0.29	0.29	
Trade & commerce	17.81	15.75	16.53	..	..	..	17.38	13.68	14.95	17.17	7.18	15.50	
Transport & storage & communication services	11.69	9.23	10.15	4.68	0.89	1.54	11.14	7.56	8.80	7.92	0.07	6.60	
Activities not adequately described Not recorded	0.73	1.71	1.34	1.44	2.44	2.27	0.79	1.85	1.49	2.87	4.37	3.12	
	0.06	0.18	0.14	..	0.15	0.12	0.06	0.18	0.13	0.12	1.52	0.36	
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

Similar data collected by Directorate of Employment, Government of Maharashtra through empirical service in those blocks where rural works projects were in operation are indicated in Table-8.

**TABLE-8**  
*Percentage distribution of working population between the agricultural and non-agricultural activities in rural works programme villages*

Division	1961			1963-64			1964-65			1966		
	Agl.	Mfg.*	Others**	Agl.	Mfg.	Others	Agl.	Mfg.	Others	Agl.	Mfg.	Others
Bombay	90.61	2.61	6.78	..	..	..	89.75	2.73	7.52	90.66	2.60	6.74
Poona	91.85	1.43	6.72	..	..	..	92.75	0.91	6.34	91.85	1.41	6.74
Aurangabad	84.53	3.85	11.62	..	..	..	83.38	3.72	12.90	84.51	3.82	11.67
Nagpur	87.19	4.08	8.73	87.93	3.05	9.02	86.13	4.47	9.40	87.26	4.09	8.65
<b>TOTAL</b>	86.76	4.12	9.12	87.93	3.05	9.02	88.31	2.85	8.84	86.73	4.12	9.15

#### 4.1 Employment :

The Directorate of Employment, Government of Maharashtra, has been compiling and publishing regularly employment position in the State of Maharashtra. The employment review is compiled on the basis of the employment market information, received from all establishments in the public sector and non-agricultural establishments of the private sector employing 10 or more employee excepting the Greater Bombay area where the coverage is limited to establishments employing 25 and more employees in the non agricultural, non-household industries.

The Employment Marketing Information Programme does not cover the employment in the following sectors: (i) agriculture; (ii) self-employment; (iii) household establishments; (iv) establishments in the private sector\* employing less than 10 employees; (v) establishments in the private sector employing less than 25 employees in the Greater Bombay area; and (vi) defence forces.

#### 4.2 Limitations :

The Employment Statistics based on EMI Programme are subject to a number of limitations; some of them are as follows :

(1) Comprehensiveness of employers register which is the pivot of Employment Market Information Programme is basic to this system of data. It is likely that some of the establishments would have escaped identification and consequently the employment data are under estimates to some extent.

(2) *Non-response*.—The percentage of non-responding establishments and the estimated employment therein, to the total in March, 1967 & March 1968 was 5.4 and 5.2 respectively.

(3) Inadequate coverage of employment in construction activity particularly on private account.

(4) *Exclusion of certain categories of employees*.—Taking into consideration the various limitations as well as conceptual differences in the definition of various concepts and similar statistics compiled by various other official agencies such as NSS, Labour Department and the Employment Surveys and also various studies undertaken by the Department, the analysis and interpretation of the employment figures in the organised sectors may be made on the basis of the following :

The change in employment with the establishments in the private sector employing 10 and above, which were not covered by the Employment Market Information during certain period has been estimated on the basis of percentage change in employment in the establishments covered by the Employment Market Information and respective broad industry divisions. This may also be considered as one of the limitations in addition to those indicated above.

\*Includes all sectors of the economy except agriculture and manufacturing.

\*\*Includes household industry also.

#### 4.3 Coverage :

According to 1961 Census the population of Maharashtra was 395 lakhs consisting of 189 lakhs workers and 206 lakhs non-workers. Amongst workers 132 lakhs were deriving their means of subsistence from agriculture and the remaining 57 lakhs from non-agricultural activities. Out of 57 lakhs work force in non-agricultural activities, 12 lakhs were engaged in household industry and 45 lakhs in the non-household industry. Amongst 45 lakhs working force in the non-household industries, 20 lakhs were single and family workers and 25 lakhs were employers including employees. At the end of March, 1961 the Employment coverage under the Employment Market Information Programme was 18 lakhs or about 72% of the total workers in the non-agricultural non-household industries in the State. Thus, the total picture intended to be depicted in this review will be distorted by non-coverage of about 28% employment in this sector.

#### 4.4 Employment growth during the plan period :

Backlog of unemployed, new entrance to the labour force, job opportunities created and achieved etc., are indicated in Table-9.

TABLE 9  
Employment growth

(Figures in lakhs)

1. (a) Backlog of unemployment . . . . .	7.84	17.79	28.26
(b) New entrants . . . . .	20.05	14.05	25.65
Total . . . . .	27.89	31.84	53.91
<hr/>			
2. Additional job created			
(a) Agriculture . . . . .	5.11**	..	..
(b) Non-agriculture . . . . .	5.00*	..	..
Total . . . . .	10.11	3.58	..
<hr/>			
3. Backlog . . . . .	17.79	28.26	..

\* Increase in employment in the organised sector covered by the Employment Marketing Information Programmes.

\*\* Both in agricultural and non-agricultural sectors.

*45 Employment growth in organised Sector :*

The total employment in the sectors covered by the Employment Market Information Programmes during each year ending March 31 from 1961 onwards is given in Table-10.

TABLE-10

*Employment growth in organised Sector*

At the end of March of	Total Employment (in lakhs)	Percentage Change Over the Previous Year
1961 . . . . . . . .	18.04	..
1962 . . . . . . . .	18.63	3.4
1963 . . . . . . . .	19.44	4.3
1964 . . . . . . . .	20.23	4.1
1965 . . . . . . . .	21.44	6.0
1966 . . . . . . . .	22.68	5.8
1967 . . . . . . . .	23.94	2.5
1968 . . . . . . . .	24.67	3.0
1970 . . . . . . . .	25.23	3.0
Percentage change between 1961-66 . . . . .	..	25.7
Average annual growth rate :		
(i) between 1961-66 . . . . .	5.1	
(ii) between 1966-69 . . . . .	2.9	

*Source : Reviews of the Employment Market Information Programmes-State Governments.*

The total employment in organised sector increased by 25.7% and the average annual increase was of the order of 5.1% during 1961-1966, that is, the 3rd plan period. The total employment in organised sector at the end of March, 1969 was 24.67 lakhs as against 22.68 lakhs at the end of March, 1966 indicating an increase of 8.7 lakhs between 1966-69, that is Post Plan period. While the annual growth rate during the Third Plan period was 5.1% is declined to 2.9% during the Post Third Plan period. The annual growth rate was highest in 1965 and lowest in 1967.

*4.6 Employment by sector :*

The employment growth rate according to public and private sectors is given in Table-11.

TABLE-11  
*Employment in public and private sectors 1961-70*

(in lakhs)

March of	Public Sector	Private Sector	Percentage Change Over the Previous year	
			Public	Private
1961 . . . . . . .	8.66	9.38	..	..
1962 . . . . . . .	9.11	9.52	5.2	1.5
1963 . . . . . . .	9.80	9.64	5.7	2.8
1964 . . . . . . .	10.46	9.77	8.5	0.2
1965 . . . . . . .	11.13	10.31	6.5	5.5
1966 . . . . . . .	11.95	10.73	7.3	4.1
1967 . . . . . . .	12.54	10.71	5.0	(-)0.2
1968 . . . . . . .	13.23	10.71	5.5	..
1969 . . . . . . .	13.57	11.10	2.6	3.6
1970 . . . . . . .	13.99	11.24	3.1	1.3
% change between 1961-66				
As annual growth rate . . . . . . .	नवायन नवायन	.	37.8	14.4
(i) 1961-66 . . . . . . .	.	.	7.8	2.5
(ii) 1966-69 . . . . . . .	.	.	13.6	3.4

*Source : Reviews of the Employment Market Information Programme in State Governments.*

A comparison between the public and private sectors is not strictly correct mainly on account of exclusion of smaller establishments employing less than 10 persons, and self-employed etc., in the private sector, only a broad comparison is possible.

*Employment growth rate :*

Employment growth rates both in the public and private sectors started declining from 1966. In the private sector the absolute employment decreased by 0.2% and 0.0% during the year 1966-67 and 1967-68 respectively as against an annual average growth rate of 3.4 per cent during the Post Third Plan period.

*4.7 Employment by industries :*

The employment and employment growth rate broad industrial divisions is given in Table-12.

TABLE-12  
*Employment growth rate*  
Employment in lakhs at the end of March of

Broad Industry Division	1961	1962	1963	1964	1965	1966	% Change between 61—66
Agriculture and forestry . . .	0·13	0·13	0·14	0·18	0·20	0·21	+61·5
Mining and quarrying . . .	0·18	0·18	0·20	0·19	0·22	0·22	+22·2
Manufacturing .	7·79	7·99	8·29	8·33	8·73	8·92	+14·4
Construction .	0·93	1·12	1·06	1·31	1·30	1·70	+82·7
Trade & commerce	0·70	0·77	0·81	0·85	0·95	10·04	+48·5
Transport storage & communication & electric, gas, water supply, etc.	3·23	3·19	3·38	3·45	3·57	3·72	+14·8
Services . . .	5·07	5·24	5·56	5·96	6·42	6·87	+35·5
Total . . .	18·04	18·63	19·44	20·23	21·44	22·68	+25·7

*Source : State Employment Review—1967-68.*

The employment and employment growth rate by broad industry divisions from 1968 to 1970 is given in Table—12(a).

TABLE-12(a)

*Employment growth rate in public and private sectors : 1968-1970*

Broad Division	Employment in Public Sector at the end of March 1968-1970	Percentage Change	Employment in Private Sector at the end of March 1968-70		Percentage Change 69/68, 70/69	Total employment 1968/69/70 (in lakhs)	Percentage Change 69/68, 70/69
			1968	69	70	69/68	70/69
1. Agriculture, manufacturing, etc.	1.49	1.57	5.37	0.64	8.39	8.67	8.91
2. Trade & commerce and transport	73.87	3.94	4.25	1.81	7.87	0.90	0.75
3. Service, etc.	6.32	6.48	6.66	2.53	2.78	1.29	1.37
						3.34	2.77
						9.88	10.22
						0.49	0.64
						2.44	3.31

#### 4.8 Manpower situation :

For any meaningful appraisal of the manpower situation, i.e., supply and demand for different types of manpower in various industries and areas, it is necessary to have comprehensive and authentic information regarding the backlog and fresh entrance to the labour market, their age distribution, levels of skills and their job preference, etc. on the one hand and current and future demands arising in the economy on the other. In the absence of these and other relevant data, it would be advisable to depend upon the available data which by and large flow from the operations of the National Employment Service. Inspite of their known limitations they seem to indicate broadly the emerging trends. The data on the number of job seekers and their characteristics like age, education, duration of registration are given in Table Nos. 13, 14, 15, 16 and 17.

TABLE-13  
*Number of registrants on the live register*

Year	No. of Applicants on the Live Register of Employment Exchanges at the end of December, (in lakhs)	Percentage Change Over the Previous Year
1961 . . . . .	1.72	..
1962 . . . . .	2.16	25.6
1963 . . . . .	2.45	13.4
1964 . . . . .	2.55	4.1
1965 . . . . .	2.68	5.1
1966 . . . . .	2.78	2.2
1967 . . . . .	2.87	3.2
1968 (March) . . . . .	2.90	0.1
1969 (March) . . . . .	2.92	0.7
1970 (June) . . . . .	2.96	1.4

It could be seen from the above that the annual average growth rate of the number of employment seekers on the Live Register of Exchanges in the State has declined from 12.4% between 1961-66 to 3% in the Post-Plan period although absolute number is increasing. This significant increase in the number of employment seekers on the Live Register of Exchanges between the Third Plan period was mainly attributed to :

- (a) Opening of additional Employment Exchanges.
- (b) Expansion of Employment Service including Employment Information and Assistance Bureau in the rural areas.
- (c) Promulgation of Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959 which resulted in notifying large number of vacancies to the Exchanges from the private sector establishments.

TABLE-14  
*Employment seekers by level of education*

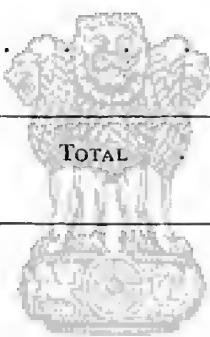
	Qualified	1961	1962	1963	1964	1965	1966	1967	1968	Percen-
										tae
										Change
										1961-66
1. Matriculates and above but below graduates		50.98	54.79	60.31	63.09	67.24	82.91	97.78	99.89	62.6
2. Graduates	.	4.52	5.18	4.96	5.03	6.06	6.21	8.90	10.11	37.4
3. Illiterates & others	.	116.20	155.80	180.03	187.16	195.28	189.15	180.00	184.70	62.8
<b>TOTAL</b>	.	171.70	215.77	245.30	255.28	268.58	278.27	286.68	294.70	82.1

It would also be seen that the flow of educated work seekers has increased by 60.6% between 1961-66 and by 19.7% between 1966-67. The significant increase in the number of educated employment seekers is as a result of the expansion of educational activities, expansion of National Employment Service and promulgation of the Employment Exchanges' Compulsory Notification of Vacancies Act, 1959.

TABLE-15

*Duration of registration*

Period for which Remained on Live Register	Number of Applicants on Live Register of Exchanges at the end of September, 1969		
	Submitted	Non-Submitted	Total
Less than 1 year . . . . .	54,448 (17·3)	1,46,806 (46·3)	2,01,254 (63·9)
1 year to 2 years . . . . .	37,139 (11·8)	31,084 (9·9)	68,223 (21·7)
2 years to 3 years . . . . .	16,311 (5·1)	9,916 (3·2)	26,227 (8·3)
3 years and above . . . . .	15,868 (5·8)	3,139 (0·3)	1,007 (6·1)
TOTAL . . . . .	1,23,766 (40·0)	1,90,945 (60·0)	3,14,711 (100·0)



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TABLE-16  
*Fresh entrants classified according to educational level*

	1961	1965	1966	1967	1968	1969	1970	% chang 1961-70
(1) Matriculates and intermediates	35,031 (29)	50,047 (24)	57,467 (27)	67,723 (32)	71,264 (34)	72,600 (35)	73,300 (34)	64.0
(2) Graduates	1,232	2,304	2,480	3,144	3,223	..	..	101.3
(a) Arts	..	..	..	..	..	..	..	..
(b) Science	..	..	..	1,449	1,244	2,780	..	(-)-25.4
(c) Commerce	..	..	..	533	1,146	1,520	2,412	(+)+83.3
<b>TOTAL graduates</b>	<b>3,432</b>	<b>4,899</b>	<b>5,234</b>	<b>6,795</b>	<b>7,425</b>	<b>7,200</b>	<b>9,500</b>	<b>52.5</b>
<b>TOTAL educated</b>	<b>38,463 (32)</b>	<b>54,946 (26)</b>	<b>62,011 (30)</b>	<b>74,563 (35)</b>	<b>78,689 (38)</b>	<b>79,800 (38)</b>	<b>82,800 (38)</b>	<b>63.0</b>
Middle school standard	24,718 (20)	49,556 (24)	50,870 (24)	57,089 (27)	61,917 (29)	98,300 (47)	1,03,200 (47)	128.0
Literates	37,784 (31)	51,509 (25)	56,402 (27)	49,004 (23)	46,358 (22)	..	..	49.3
Other including Illiterates	20,616 (17)	52,871 (25)	40,174 (19)	31,616 (15)	23,190 (11)	29,600 (14)	32,000 (15)	95.2
<b>TOTAL</b>	<b>1,21,581 (100)</b>	<b>2,08,882 (100)</b>	<b>2,09,457 (100)</b>	<b>2,12,272 (100)</b>	<b>2,10,154 (100)</b>	<b>2,07,400 (100)</b>	<b>2,18,300 (100)</b>	<b>72.3</b>

Note : Figures in brackets indicate the percentages.

It would be seen from the above table that nearly 2/3rds of the total applicants on the Live Register of Exchanges in the State at the end of September, 1969 were for a period of less than one year and out of these about 3/4 were not submitted against any vacancies.

TABLE-17  
*Age distribution of works seeking*

Age Group	Numbered in 000's	Percentage to total	
		1968	1969
Below 14 years	0.5	0.1	0.2
15 to 19 years	62.2	23.1	20.7
20 to 24 years	163.0	52.5	54.3
25 to 34 years	62.1	18.5	20.7
35 to 44 years	10.3	5.2	3.4
45 to 54 years	1.8	0.6	0.6
55 and above	0.2	0.0	0.1
<b>TOTAL</b>	<b>300.1</b>	<b>100.0</b>	<b>100.0</b>

A comparison of the proportion of work seekers by age groups revealed that there was slight decline of about 3.0% in the age group of 15 to 19 while there was corresponding increase in the age group of 20 to 24 and 25 to 34.

A close analysis of work-seekers by level of education age groups, and sex revealed that :

- (a) The women work-seekers constituted 11.0% of the total work seekers in the State.
  - (i) Amongst these women work-seekers about 75% were in the age group of 15 to 24.
  - (ii) Similarly, amongst women work-seekers 55% were Matriculates and above.
- (b) Amongst male work-seekers about 75% were in the age group of 15 to 24 years.
  - (i) Similarly as many as 60% of the total male work-seekers were below matriculates including illiterates and the remaining 40% were matriculates and above.
  - (c) Amongst total school dropouts including illiterates 75% were in the age group of 15 to 24.
  - (d) About 20% of the school dropouts including illiterates were in the age group of 25 to 35.

#### 5.0 Intensity of employment :

The data on intensity of work during the reference week in terms of hours at work for principal and all subsidiary occupations collected for each gainfully employed members of the household under the urban labour force survey (13th Round NSS) are given in Table-18 and the data on the distribution of gainfully employed persons according to number of days of work during the reference week collected in the 16th Round (Urban areas only) are given in Table-19.

TABLE I

*Percentage distribution of gainfully employed person by hours at work during the reference week*

TABLE-19

*Percentage distribution of employed persons according to day at work*

Days Worked (1)	Percentage of the employed persons (2)
0 . . . . . . . . .	1.67
1 . . . . . . . . .	1.70
2 . . . . . . . . .	3.03
3 . . . . . . . . .	2.32
4 . . . . . . . . .	3.55
5 . . . . . . . . .	7.07
6 . . . . . . . . .	44.15
7 . . . . . . . . .	34.61
Not Reported . . . . .	1.90
TOTAL . .	100.00

About 79% of the working persons worked for 6 to 7 days in the week. The remaining about 21% worked for less than a week. It was probably among these 21% employed persons that some under-employment existed in the sense that some of them might be available for work on some days. Also, about 6 to 7% employed persons worked for 3 days or less, in the week.

6.6 The under-employment during the course of the urban labour force survey of the 13th Round of the NSS, information about the availability for additional work was collected in terms of extra hours available for work. In order to safeguard against the tendency to report as available for work irrespective of actual hours worked, the number of hours of daily work were specified and no hours were considered to be available on a day if a person had worked for the specified number of hours on that day. Similarly when a person had worked for some hours on a day and also reported to be available for work then the total of the number of hours actually worked and the extra hours available for work on that day was not allowed to exceed the specified number of daily hours of work. The specified number of hours was 8 for organised industries and 10 for others. The Table-20 gives the distribution of employed persons according to extra hours available for work.

TABLE-20

*Percentage distribution of gainfully employed persons according to extra hours available for work*

Extra Hours Available for Work	Greater Bombay	Other Urban Areas	State	Greater Bombay	Other Urban Areas	State	Greater Bombay	Other Urban Areas	State			
0	.	.	.	97.31	89.10	92.16	93.49	85.75	87.05	97.06	88.44	91.37
1—7	.	.	.	0.21	0.70	0.52	“	0.59	0.49	0.20	0.68	0.51
8—14	.	.	.	0.33	2.68	1.81	1.15	2.91	2.64	0.39	2.73	1.94
15—28	.	.	.	0.70	3.32	2.34	2.29	3.29	3.19	0.84	3.30	2.49
29—42	.	.	.	0.88	2.87	2.12	1.92	4.24	3.74	0.90	3.14	2.37
43—56	.	.	.	0.27	0.75	0.58	..	2.34	1.96	0.25	1.07	0.79
57—70	.	.	.	0.18	0.33	0.27	1.15	0.59	0.68	0.25	0.38	0.33
Not Recorded	.	.	.	0.12	0.25	0.20	..	0.29	0.25	0.11	0.26	0.20
Total	.	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	

Source : 13th Round of NSS, State Sample.

Only 8% persons were willing to do any additional work and hence can be considered to be underemployed. While 8 per cent males were underemployed, 13% females were underemployed.

The under-employment can be classified as moderate or severe depending upon the hours actually worked. Persons working less than 29 hours in a week i.e., less than 4 hours in a day and available for additional work are considered as severely underemployed. Similarly persons working between 29 and 42 hours in a week i.e., 4 to 6 hours per day and available for additional work are termed moderately underemployed.

The persons working between 42 and 56 hours in a week i.e., 7 to 8 hours a day and available for additional work are considered as nominally underemployed. The distribution of employed persons according to intensity of under-employment is given in Table-21.



TABLE-21

*Percentage distribution of employed persons according to intensity of under-employment*

Intensity of Under-Employment	Greater Bombay	Other Urban Areas	State	Greater Bombay	Other Urban Areas	State	Greater Bombay	Other Urban Areas	State		
1. Severe	.	.	1.27	3.25	2.51	3.83	7.90	7.24	1.46	4.17	3.26
2. Moderate	.	.	1.00	5.04	3.54	2.68	3.88	3.62	1.09	4.81	3.55
3. Nominal	.	.	0.30	2.36	1.59	..	2.18	1.84	0.28	2.32	1.62
TOTAL (1 to 3)	.	.	2.57	10.65	7.64	6.51	13.96	12.70	2.83	11.30	8.43
Not underemployed	.	.	97.31	89.10	92.16	93.49	85.75	87.05	97.06	88.44	91.37
Not recorded	.	.	0.12	0.25	0.20	..	0.29	0.25	0.11	0.26	0.20
Total	.	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source : 13th Round of NSS State Sample.

*7.0 Unemployed population :*

During the course of 1961 Census an attempt was made to obtain the number of unemployed persons that is seeking and available for work separately for those seeking employment for the first time and those employed before but now out of employment and seeking work. The relevant figures are given in Table-22.

*7.1 Urban unemployment :*

The data collected during the urban labour force survey under the 13th Round of NSS revealed that about 94% of the unemployed persons belonged to the age group 16 to 61 years. The unemployed persons in the age group 7-15 years and 62 years and above numbered six per cent and half per cent respectively. The age group 16-61 years accounted for 92% of unemployed males and 99% unemployed females. The distribution of unemployed persons according to the age group is given in Table-23.



TABLE-22

*Intensity of unemployment*

Age Group	Total	Labour Force		Seeking Employment for the First Time		Percentage of Persons Employed earlier but now Unemployed and Seeking Work							
		P	M	F	P	M	F	P	M				
1	2	3	4	5	6	7	8	9	10				
<i>Total</i>													
TOTAL .	.	.	.	.	19.13	11.83	7.30	0.47	0.72	0.07	0.46	0.70	0.07
0-14	.	.	.	.	1.41	0.71	0.70	0.19	0.35	0.02	0.20	0.35	0.04
15- 34	.	.	.	.	9.82	5.97	3.85	0.84	1.31	0.13	0.59	0.92	0.06
35- 59	.	.	.	.	6.85	4.40	2.45	0.07	0.10	0.01	0.34	0.50	0.06
60+	.	.	.	.	1.05	0.75	0.30	0.03	0.05	0.01	0.40	0.44	0.29
<i>Rural</i>													
TOTAL .	.	.	.	.	14.92	8.30	6.62	0.13	0.22	0.01	0.11	0.19	0.02
0-14	.	.	.	.	1.32	0.65	0.67	0.11	0.20	0.01	0.11	0.20	0.03
15- 34	.	.	.	.	7.50	3.99	3.51	0.23	0.41	0.02	0.14	0.24	0.01



TABLE-23

*Percentage distribution of unemployed persons by age group*

Age Group (in years)	Males			Females			Persons		
	Greater Bombay	Other Urban Areas	State	Greater Bombay	Other Urban Areas	State	Greater Bombay	Other Urban Areas	State
1	2	3	4	5	6	7	8	9	10
0-6 .	.	.	.	.	.	.	.	.	.
7-15 .	.	.	.	3.53	9.33	7.25	1.14	0.96	3.08
16-17 .	.	.	.	5.84	3.20	4.20	6.06	10.22	9.57
18-21 .	.	.	.	22.01	26.40	26.63	45.45	19.32	23.45
22-26 .	.	.	.	30.87	18.40	23.10	27.28	29.32	20.57
27-36 .	.	.	.	18.08	17.07	17.45	15.15	17.05	16.75
37-46 .	.	.	.	8.93	10.13	9.68	3.03	17.05	14.83
47-56 .	.	.	.	3.53	8.53	6.65	3.03	14.77	12.92
57-61 .	.	.	.	2.21	5.87	4.49	..	1.13	0.95
62 & above .	.	.	.	..	1.07	0.65	..	..	..
Total .	.	.	.	100.00	100.00	100.00	100.00	100.00	100.00

Note—The above results are based on unemployed persons (501) surveyed. On account of meagre sample size and subsequently large sample error the results should be interpreted cautiously.

7.2 A similar analysis compiled on the basis of the urban labour force survey of the 16th Round of the National Sample Survey revealed that about 93% of the unemployed persons were in the age group of 15-49 years. More than 57% were below 24 years.

The study revealed that in the labour force, the proportion of unemployed persons was highest for the age group 15-19 years, after which this rate steadily declined upto the age of 49 years. The rate of unemployment for the age group 15-19 years was 9.5% and for the age group 40-49 years, it was 0.9%. For the last age group (50-59 years), this rate increased to a little below 2%.

The rates of unemployment for males were slightly higher than those for females for all age groups except the last one (50-59 years), for which the rate for females was higher by about one per cent.

TABLE-24  
*The age distribution of unemployed persons (year 1960-61)*

Age Group (in years)	Percentage for Males			Percentage for Persons
		2	3	
0-14	0.59		1.41	0.72
15-24	57.28		57.93	57.38
25-49	36.70		29.70	35.63
50-59	5.43		10.96	6.27
TOTAL	100.00		100.00	100.00

7.3 The information collected during the 13th Round of the National Sample Survey revealed that 36% unemployed persons were illiterate, 53% were literate and only 11% were educated i.e. had passed matric or higher examination. While 26% unemployed males were illiterate, 63% unemployed females were illiterate. There were as many as 62% illiterate unemployed males as compared to 38% literate unemployed females. The educated unemployed males and females numbered 12% and 9% respectively. The detailed data are given in Table-25.

7.4 Similar information collected during the 16th Round of National Sample Survey regarding urban labour force survey revealed that a very large proportion of the unemployed persons were literate but below matriculation. They were as many as 65% of the total unemployed. Of the remaining, about half were illiterate while the remaining which accounted for about 18% of the unemployed were matriculates or above.

The rate of unemployment was found to be 4% i.e. the highest those who were matriculates and above (educated class). The unemployment rate was lowest i.e. 1.5% for illiterate persons.

Excepting the class of illiterates, the rates of unemployment for females were higher than those of males. For illiterate persons, the proportion of the unemployed in the labour force was about the same for males and females. Among the educated class, hardly 4% of the unemployed males were unemployed whereas nearly 13% of the females in that class were unemployed.

TABLE-25

*Percentage distribution of unemployed persons according to general education*

### 7.5 Duration of unemployment :

The Urban Labour force survey (13th Round) undertaken in Sept., 1957 to May, 1958 revealed that 46 per cent persons were unemployed for a period upto six months. The number of persons unemployed for more than six months and upto two years was 26%. The persons who were unemployed for more than two years numbered only seven per cent. It is observed that the duration of unemployment was found to be higher for literate and educated persons as compared to illiterate persons. Similarly the duration of unemployment was more for diploma holders as compared to persons without any technical qualifications.

7.6 Similar study made on the basis of the urban labour force survey conducted during July, 1960 to December, 1960 revealed that out of the total unemployed, nearly 41% were found to be unemployed for more than a year. About 25% were unemployed for 6 months to one year, and the remaining about 35% were unemployed for less than six months. As many as 75% of the unemployed matriculates or intermediates (not graduates) were unemployed for more than 6 months. For graduate unemployed persons, while proportion was about 66%. For unemployed persons with lower educational qualifications, the proportion of those being unemployed for more than 6 months was smaller than the educated class, mentioned above.

### 8.0 24th round of the NSS (1969-70)

In the 24th round of the NSS, data on employment and unemployment (activity particulars) were collected in the "Integrated Household Survey". The data collected have been summarised and given below :—



*Distribution of population by labour force status*

The percentage distribution of persons according to labour force status, age group and sex separately for rural and urban areas are given in Table-26 below :

**TABLE-26**  
*Percentage distribution of persons according to labour force status, age group and sex by small and urban areas*

Age Group	R U R A L						U R A B A N					
	Employed			Unemployed			Employed			Unemployed		
	M	F	P	M	F	P	M	F	P	M	F	P
0-9	0.22	0.12	0.17	..	..	..	0.15	0.14	0.03	0.02	0.03	..
10-14	2.42	1.89	2.16	0.01	0.02	0.01	0.06	0.08	0.07	0.72	0.23	0.49
15-59	45.89	33.47	34.80	0.41	0.49	0.46	0.18	0.23	0.22	44.82	10.91	28.83
60+	3.01	0.91	1.99	0.05	0.04	0.04	0.02	0.01	1.98	0.49	1.28	0.07
TOTAL	51.57	36.39	44.12	0.47	0.55	0.61	0.39	0.47	0.44	47.55	11.65	30.63

**Under-employment:**—The percentage distribution of persons, reporting extra hours available for work by age group and sex separately for rural and urban areas was as given in Table-27

**TABLE-27**

Age Group	Rural			Urban		
	Male	Female	Person	Male	Female	Person
0-9	..	..	..	..	..	..
10-14	..	..	..	6.06	4.00	..
15-59	..	..	..	93.94	100.00	96.00
60+	..	..	..	..	..	..
TOTAL	100.00	100.00	100.00	100.00	100.00	100.00

*9.0 25th Round of the National Sample Survey :*

The study was made on the economic condition of the weaker sections of the rural population. The collection of data for this Round canvassed in the middle of July, 1970 and continued upto the end of June, 1971. The villages formed the first stage units. In each village all households were divided into three substrata on the basis of (1) households having no cultivable land (2) the lowest 10% of the households having cultivated land and (3) remaining households. On an average about 2 households were selected from each substrata. The weaker sections of the rural population comprised of two groups (i) small cultivated households of the lowest 10% of households having cultivable land and (ii) noncultivating wage earner households of the household having no cultivable land. Separate schedule for the two groups of the weaker sections of the rural population were canvassed.

The data collected on (i) time disposition during the reference week of all the members of the household alongwith the economic activities as well as the earnings of the wage earners during the same period, (ii) possibilities of safeguarding the income of the household from annual growth and non-agricultural activities and willingness of the members of the households to move outside the village in the event of regular full-time wage employment being offered to them particularly in public works and analysis of state migration separately in respect of small cultivating households and non-cultivating wage earner households are reproduced in the Table—28.

*9.1 Employment :*

The percentage distribution of persons by economic activities by weaker sections of the rural population is given in Table—28.

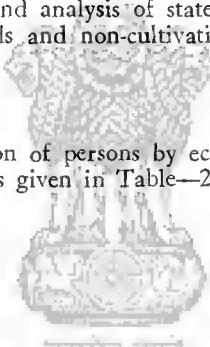


TABLE-28

*The percentage distribution of persons by economic activity by the weaker section of the rural population*

Economic Activity	Small Cultivator Households						Non-cultivator Wage Earner Households					
	Age Group in Years						Age Group in Years					
	0-9	10-14	15-44	45-59	60+	Total	0-9	10-14	15-44	45-59	60+	Total
<i>Males</i>												
1. Worked in farm . . .	0.2	14.0	75.9	72.1	52.8	42.0	1.0	17.0	76.8	72.1	54.4	45.3
2. Worked in nonfarm occupation . . .	0.1	1.0	7.9	6.5	2.9	4.1	0.1	3.1	98.7	9.7	15.2	6.2
Workers . . .	0.3	15.0	83.8	78.6	55.7	46.1	1.1	20.1	86.5	81.8	69.6	51.5
3. Not engaged in work (gainful) . . .	98.9	82.4	8.6	4.8	24.2	47.1	98.9	75.1	7.3	4.0	21.9	43.3
4. Seeking and/or available for work . . .	1.0	2.6	7.6	16.6	20.1	6.8	..	4.8	6.2	14.2	8.7	5.2
<i>Females</i>												
1. Worked in farm . . .	0.4	10.4	58.4	53.4	19.8	31.3	0.8	12.3	53.8	53.0	29.3	31.2
2. Worked in nonfarm occupation . . .	..	3.8	4.5	6.2	0.2	2.9	0.2	3.0	4.2	4.2	0.3	2.5
Workers . . .	0.4	14.2	62.9	59.6	20.0	34.2	1.0	15.3	58.0	57.2	29.6	33.7



Among the small cultivator households above 40.3 per cent, 36.8% in the farm and 3.5 per cent in the non-farm occupation were employed. Among the non-cultivating wage earner households, 42.4%—38.0% in the farm and 4.4% in the non-farm occupation were employed. The percentages of male workers both in the farm and non-farm occupations were higher than females both in respect of small cultivating households and non-cultivating wage earner households.

## 9.2. Earnings:

Information collected in respect of earnings of employees engaged in agriculture and other occupations both in respect of small cultivator households and non-cultivator wage earner households is given in Table-29.

TABLE-29

### *Small cultivator households non-cultivator wage earner households*

Age Group in Years	Average Earnings per Manday in Rupees			Average Earnings per Manday in Rupees		
	For those who Worked in other Farms on Salary or Wages	For those who Worked in non- Farm occupa- tion as Non-self Employed	For all Non-self Employed	For those who Worked in other Farms on Salary or Wages	For those who Worked in Non- Farm Occupations as Non-self Employed	For all Non-self Employed
<i>Male</i>						
1. 0-9	.	..	..	1.75	..	1.75
2. 10-14	.	1.04	1.17	1.04	1.15	1.14
3. 15-44	.	2.27	2.82	2.32	2.28	2.60
4. 45-59	.	2.22	2.34	2.23	72.19	2.01
5. 60 & above	.	1.85	2.25	1.87	2.10	2.63
<b>TOTAL</b>	.	<b>2.17</b>	<b>2.65</b>	<b>2.22</b>	<b>2.20</b>	<b>2.38</b>
<i>Female</i>						
1. 0-9	.	0.80	..	0.80	1.00	1.25
2. 10-14	.	1.16	0.89	1.08	0.94	0.96
3. 15-44	.	1.25	1.15	1.24	1.22	1.24
4. 45-59	.	1.21	1.40	1.23	1.11	1.42
5. 60 & above	.	0.83	0.75	0.83	2.75	0.50
<b>TOTAL</b>	.	<b>1.22</b>	<b>1.17</b>	<b>1.22</b>	<b>1.31</b>	<b>1.24</b>
<i>Persons</i>						
1. 0-9	.	0.80	..	0.80	1.50	1.25
2. 10-14	.	1.07	0.95	1.05	1.06	1.24
3. 15-44	.	1.80	2.24	1.84	1.83	2.12
4. 45-59	.	1.84	1.98	1.86	1.79	1.84
5. 60 & above	.	1.43	2.12	1.47	2.50	2.31
<b>TOTAL</b>	.	<b>1.76</b>	<b>2.09</b>	<b>1.79</b>	<b>1.83</b>	<b>1.98</b>

The earnings of the non-self-employed workers in the non-cultivator wage earners were higher than the small cultivator households. In both the strata the earnings of male workers were higher than the females. While the earnings of the male non-self-employed workers were higher in the non-farm occupation, it was not in the case of non-self-employed female workers. The non-self-employed workers in the age group 15-44 years earned maximum in both the strata except the workers aged 60 and above in the non-cultivating wage earner households.

9.3. In the small cultivator households the percentage of unemployed that is number of workers seeking and available for work to the total workers irrespective of their ages were 1.3—1.9 for males and 0.7 for females while the percentage of unemployed among the non-cultivator wage earner households was 2.5—2.8 for males and 2.3 for females.

#### 9.4 *Incidence of unemployment :*

Incidence of unemployment is defined as the percentage of unemployed that is persons seeking and/or available for work to the total labour force that is employed including persons not available for work due to illness, leave rest, etc., and unemployed. The incidence of unemployment compiled by sex and age group and status are indicated in Table-30.

TABLE-30  
*Incidence of unemployment*

Age Group	Small Cultivator Households			Non-cultivator Wage Earner Households		
	M	F	P	M	F	P
0—9	. 40.99	..	11.02	..	..	..
10—14	. 4.17	7.19	5.60	5.37	7.56	6.10
15—44	. 3.74	1.74	2.86	0.38	5.68	4.58
45—59	. 3.01	0.73	2.24	9.28	9.06	9.24
60 & above	. 2.15	0.28	1.50	3.68	0.09	1.56
TOTAL	. 3.00	1.77	2.83	4.95	5.79	5.31

Among the persons of the labour force *i.e.* aged 15-59, the incidence of unemployment was highest in the age group 45-59 which is rather unusual. The incidence of unemployment was approximately three times larger in the non-cultivating wage earner households than the small cultivator households in the age group 45-59. As a whole the incidence of unemployment was more pronounced in the non-cultivating wage earner households than small cultivator households. In the non-cultivating wage earner households the incidence of unemployment among the female workers was more than the male workers.

#### 10.0 *Ad-hoc studies :*

The Directorate of Employment Government of Maharashtra in 1965 made an attempt to gauge the extent to which trainees from Industrial Training Institutes have been able to find employment in large scale industrial establishments employing 500 or more workers. Towards the close of 1965 as many as 2,151 I.T.I. trained personnel were on the Live Register of Employment Exchanges in

the State as against 2,260 who had been indentified as employed in 40 such establishments in the Public Sector and 81 in the Private Sector with a total labour force of 2,59,300 including about 26,000 Craftsmen.

Further analysis showed that 1,840 of these 31.4% were engaged in Manufacturing activities, 7.3% in Transport, Storage and Communication activities, 4.3% in Services, 3.8% in Mines and Quarrying, 2.7% in Construction and 0.3% in Electricity, Gas, Water Supply, etc. About 0.2% were reported to be engaged in Trade, Commerce and allied activities.

Earnings and experience pattern of the employed trainees showed that 21 reported daily earnings of Rs. 10/- and above and 13 reported monthly earnings of over Rs. 300/-. Twenty-three out of the 34 reported experience of over 5 years, while 31 out of the 34 had obtained their employment through their own efforts; the remaining 3 through Employment Exchanges. The majority—1,203—had reported daily earnings between Rs. 3/- and Rs. 5/- or monthly earnings between Rs. 10/- and Rs. 150/-.

In terms of experience, as many as 585 were reported to have less than six months experience, 179 between six and twelve months, 188 more than one year but less than two years, 201 with more than 2 years but less than 5 years and 98 with over 5 years experience. It is also seen that as many as 266 with less than six months experience reported daily earnings between Rs. 3/- and Rs. 5/- as against similar earnings for 151 with less than one year experience. Monthly earnings between Rs. 10/- and Rs. 150/- were reported by 53 with less than six months experience and 49 with experience of over six months and less than one year.

It was of interest to note that as many as 1,039 of those I.T.I. personnel found employment in the Bombay-Thana Industrial Area with 46 establishments, while another 530 were in the Poona Industrial complex with 18 establishments. Satara with 140 trainees in two establishments and Nagpur with 116 in five establishments reported the next large number of I.T.I. trained personnel.

The majority of the trainees who were traced to the establishments under this study were from the Industrial Training Institute in Poona (399), Bombay (379), Satara (223), Dhulia (109), Kolhapur (108) and Thana (102). This information was furnished by 1,850 respondents.

The average rate of earnings per manday by employees of different sex-age groups engaged in agriculture and other occupation are given in Table-29.

### MYSORE

#### *Labour force :*

The data from 1971 Census, so far published, relate to the number and percentage of the population classified as "Workers" and "Non-Workers", on the basis of their major time disposition being some gainful activity or non-economic part-time e.g., household duties, studies etc., with reference to the period of a week preceding enumeration in case of regular vocations and one year in case of causal, intermittent, or seasonal workers. Now data based on one per cent sample are also available on the number of non-workers having some subsidiary gainful activity and "others" category includes the persons who could not be classified in other specific categories of non-workers and who were seeking some gainful work. On the basis of these data the labour force computed as per 1971 Census is given in Table No. 1. The corresponding data based on the results of 1961 Census are also given.

TABLE-I

*Percentage of population in labour force as per 1971 and 1961 censuses*

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Area	Sex	Persons in labour Force					Percentage of Persons in Labour Force as per 1961 Census
		Workers	Non-Workers having Subsidiary activity	Total Number of Persons with Gainful Work	"Others" among Non-workers	Total Persons with Work and Seeking Work	
<b>As Per 1971 Census</b>							
State	Male	81,23,944	9,360	81,33,244	65,800	81,99,044	54.88
	Female	21,67,240	97,500	22,64,340	15,600	22,79,940	58.74
Persons		1,02,91,184	1,06,400	1,03,97,584	81,400	1,04,78,984	32.05
Rural	Male	63,11,426	7,000	63,48,428	24,900	63,73,026	45.67
	Female	18,87,600	84,300	19,21,900	6,000	19,27,900	56.78
Persons		81,78,726	91,300	83,70,026	30,900	83,00,926	60.51
Urban	Male	17,32,818	2,300	17,85,118	40,900	18,26,018	36.79
	Female	3,29,640	12,800	3,42,440	9,600	3,52,040	48.82
Persons		21,12,458	15,100	21,27,558	50,500	21,78,058	30.61

**The NSS Data :**

The percentage of population in labour force for the whole of the State, computed on the basis of the data of 19th Round of NSS (1964-65) is given in Table No. 2. For other rounds the figures for the State as a whole are not available.

TABLE-2

*NSS data regarding labour force in Mysore State (19th round)*

Particulars	Percentage
1. Persons in labour force . . . . .	41·18
2. Male population in labour force . . . . .	54·18
3. Female population in labour force . . . . .	27·24
4. Percentage of males in the labour force . . . . .	67·89
5. Percentage of females in the labour force . . . . .	32·11
6. No. of employed persons and their percentage in the labour force:	
Persons . . . . .	95·78
Male . . . . .	96·17
Female . . . . .	94·94
7. Percentage of male and female among total employed persons :	
Male . . . . .	68·17
Female . . . . .	31·83

*Source :* NSS Report No. 173-issued by the Cabinet Secretariat, Government of India.

For rural and urban areas of Mysore separately the available NSS data are given in Table-3.

TABLE-3

*Percentage of population in labour force as per available NSS data*

Area	Survey Particulars	Male	Female	Persons
Rural . .	19th Round (1964-65) (Report No. 173)	56·12	34·49	45·62
Urban . .	17th Round (1961-62) (Central Sample)	50·20	14·15	32·27
	18th Round (1963-64) (States Sample)	46·77	7·42	17·74
	18th Round (1963-64) (Central Sample)	48·92	14·55	32·57
	19th Round (1964-65) Report No. 163 (Central Sample)	47·38	14·15	32·27
	19th Round Report No. 173 . . . . .	51·20	14·53	33·47
	20th Round (1965-66) (Central Sample) . . . . .	46·67	11·64	29·89
	21st Round (1966-67) (Central Sample) . . . . .	48·87	12·86	31·49

For rural areas data are not available for the rounds other than 19th. For urban areas the results of rounds subsequent to the 21st round of NSS are not yet published. The NSS had used the reference period of one week preceding the date of enquiry for the data on labour force status in the above said rounds. Only the current status prevailing in the reference week had been considered to classify persons by labour force status. A person was considered employed if he had been with some gainful activity (either at work or with job but not at work). In urban areas those who were seeking work actively through registration with employment exchanges or had contacted prospective employers during the two months preceding the date of enquiry or had put in written application for jobs were classified as unemployed provided they had not gainful activity during the reference week. In the rural areas all persons either seeking work or available for work were considered to be unemployed if they had no employment even on a single day during the week.

It is seen that the results of the State Samples of NSS are lower than the corresponding data of Central Samples in the same round (*i.e.* 18th Round). However, the data present a trend in respect of *urban* areas where, it appears, that the participation rate in the male population is near about 50 per cent and female about 13 per cent.

Age-wise distribution of the persons in labour force is available only for 1961 Census. It is given in the Table-4.

TABLE-4

*Percentage distribution of population in labour force by sex and age group*

Age Group	Rural			Urban			
	Male	Female	Persons	Male	Female	Persons	
0-14	. . . .	9·42	11·26	10·10	4·54	7·94	5·24
15-34	. . . .	46·43	50·91	48·11	52·34	49·40	51·73
35-59	. . . .	36·27	33·37	35·19	37·76	37·31	37·67
60 & above	. . . .	7·84	4·42	6·56	5·34	5·31	5·33
Age not specified	. . . .	0·04	0·04	0·04	0·02	0·04	0·03
All ages	. . . .	62·84	37·16	100·00	79·43	20·57	100·00

NSS data regarding age-wise distribution of labour force are available for urban areas for the 17th round only and are presented in Table-5. For rural areas such data are not available.

TABLE-5

*Percentage distribution of population in labour force by sex and age group in Urban Mysore (NSS—17th round 1961-62)*

Age Group							Male	Female	Persons
0—4	.	.	.	.	.	.	..	0·08	0·02
5—9	.	.	.	.	.	.	0·10	0·03	0·08
10—14	.	.	.	.	.	.	3·17	4·32	3·42
15—19	.	.	.	.	.	.	8·81	8·63	8·77
20—24	.	.	.	.	.	.	15·60	16·67	15·83
25—29	.	.	.	.	.	.	13·88	17·36	14·64
30—39	.	.	.	.	.	.	24·49	26·98	25·04
40—49	.	.	.	.	.	.	9·49	14·29	18·36
50—59	.	.	.	.	.	.	9·33	6·23	8·65
60 & above	.	.	.	.	.	.	5·15	5·41	5·19
All ages	.	.	.	.	.	.	89·21	10·79	100·00

The age groups used by the NSS are not similar to those used in 1961 Census. However, it is seen that bulk of the labour force belonged to the age group 15 to 59. In the age group 0-14 the percentage of women workers was higher than that of male workers both in the rural as well as urban areas.

Age specific participation rates are given in Table Nos. 6 and 7.

TABLE-6

*Age sex specific labour force participation rates in rural and urban areas of Mysore State  
(1961 Census)*

Age Group	Rural			Urban		
	Male	Female	Persons	Male	Female	Persons
0—14	13·58	9·65	11·62	6·00	2·81	4·43
15—34	94·72	59·79	77·02	80·45	21·63	52·44
35—59	97·95	62·42	81·59	94·34	30·77	66·38
60 & above	80·00	27·10	53·77	61·03	15·09	37·59
Ages not specified	47·90	28·89	38·94	35·01	13·35	25·01
All ages	60·51	36·79	48·82	52·77	14·98	34·73

TABLE-7

*Age specific labour force participation rates by sex in urban areas of Mysore (NSS 17th round)*

Age Group		Male	Female	Persons
0—4	.	..	0·08	0·04
5—9	.	0·35	0·03	0·20
10—14	.	13·06	4·51	8·57
15—19	.	51·23	14·26	32·90
20—24	.	87·77	25·48	56·19
25—29	.	93·84	31·95	62·48
30—39	.	98·28	29·29	63·22
40—49	.	95·01	29·93	69·37
50—59	.	95·52	19·20	57·81
60 & above	.	52·37	11·85	29·46
All ages	.	50·26	14·15	32·27

The participation rate was higher among males than that of females in all age groups. As per 1961 Census highest participation rate is in the age group 35-59 for both the sexes. With advancement of age the decline in participation rate is more marked in case of women. In urban areas the participation rate of women is much lower than the corresponding rate in rural areas.

The eighteenth Round NSS report (1963-64) reveals that in the rural areas of Mysore, Rural Labour Households were 7,99,260, out of which 6,60,860 had agricultural labour as their means of livelihood. In the average household size of 4.52 in case of a rural labour household, the number of earners amounted to 2.23 (1.19 male and 1.04 female). In an agricultural labour household, 2.29 persons were earners (1.19 male and 1.10 female) out of 4.65 persons.

## II Unemployment

### (A) Census data :

In 1971 Census no specific information was sought about unemployment as it was done in the 1961 Census. However, in the residuary category of non-workers—"Others" all those persons who did not have a gainful work as their major time disposition and those who could not be classified into the specific non-workers' categories e.g., household workers, students, rentiers and pensioners,

beggars, dependents, inmates of institutions and reported to be in search of a job were included. The number and percentage of the persons belonging to this category in the population and labour force are given in Table-8.

TABLE-8  
*Others among non-workers—1971 census*

	All State	Rural	Urban
<b>1. Number of persons classified as "Others"</b>			
<b>among non-workers :</b>			
(i) Persons . . . . .	81,400	30,900	50,500
(ii) Males . . . . .	65,800	24,900	40,900
(iii) Females . . . . .	15,600	6,000	9,600
<b>2. Percentage of "Others" non-workers :</b>			
(i) to population . . . . .	0·28	0·13	0·71
(ii) to labour force . . . . .	0·78	0·37	2·32
(iii) to the male population . . . . .	0·44	0·22	1·10
(iv) to the male labour force . . . . .	0·80	0·38	2·24
(v) to the female population . . . . .	0·11	0·05	0·28
(vi) to the female labour force . . . . .	0·68	0·31	2·73
(vii) of males among other non-workers . . . . .	80·83	83·17	80·99
(viii) of females among other non-workers . . . . .	19·17	16·83	19·01

*Source : 1971 : Provisional Census Tables-B Series—type sample obtained from the Registrar General, India.*

On the other hand the percentages of the unemployed persons as per 1961 Census are given in Table-9.

TABLE-9  
*Extent of unemployment as per 1961 census*

	All State	Rural	Urban
<b>1. Numbers of unemployed persons :</b>			
(i) Total . . . . .			
(i) Total . . . . .	46,185	10,481	35,604
(ii) Male . . . . .	42,981	10,049	32,935
(iii) Female . . . . .	3,204	432	2,672
<b>Percentage of unemployed persons :</b>			
(i) to population . . . . .	0·20	0·06	0·68
(ii) to labour force . . . . .	0·43	0·12	1·94
(iii) of males . . . . .	93·07	95·88	92·24
(iv) of females . . . . .	6·93	4·12	7·76
(v) in male population . . . . .	0·36	0·11	1·20
(vi) in male labour force . . . . .	0·61	0·18	2·27
(vii) in female population . . . . .	0·03	0·00	0·11
(viii) in female labour force . . . . .	0·09	0·01	0·74

*Source : 1961 Census—General Economic Table Part 11-B (i) Mysore State.*

## (B) NSS data :

The data for the intervening period available from the reports of the National Sample Survey are being given in Table No. 10. It may be mentioned that the persons of the age below 14 and above 60 had been excluded from the category of unemployed in the N.S.S. surveys.

TABLE-10

*Extent and incidence of unemployment as per National Sample Survey*

N.S.S. Round	Percentage of Unemployed Persons					
	To Population			To Labour Force		
	Persons	Male	Female	Persons	Male	Female
<b>Rural (1964-65)</b>						
19th Round . . .	2.10	2.25	1.95	4.60	4.01	5.65
<b>Urban</b>						
17th Round (1961-62) .	0.84	1.29	0.38	2.60	1.45	2.82
18th Round (1963-64) (State Sample) .	0.46	0.74	0.16	1.66	1.60	2.14
(Central Sample) .	0.44	0.69	0.17	1.35	1.41	1.16
19th Round (1964-65) (Report No. 163) .	0.73	0.99	0.26	2.26	2.08	1.83
19th Round (Report No. 173) .	1.17	1.74	0.57	3.49	3.40	3.92
20th Round (1965-66) .	0.61	0.78	0.43	2.04	1.67	3.69
21st Round (1966-67) .	0.50	0.75	0.22	1.59	1.53	1.71

The NSS figures about the percentage of unemployed among the total population as well as labour force are bound to be more due to the criterion of current status during a smaller reference period of a week. It is, however, seen that the figures fail to indicate the rising or declining trend, perhaps due to very inadequate sample size. However, according to the 18th Round of NSS (State Sample in 1963-64) out of the estimated urban population of 50,35,123 persons the number of unemployed persons was 21,960.

**(C) Other estimates :**

The study Group of the Planning Department of Mysore Government had calculated the backlog of unemployment by the end of the Third Five Year Plan was 7.49 lakhs. The calculations made by them are given in Table-11.

TABLE-11

*Estimates of unemployment in Mysore made by the Planning Department of the State*

Backlog of unemployment at the beginning of the II Plan  
(1956)

	lakhs
Rural	1.40
Urban	0.84
<b>TOTAL</b>	<b>2.24</b>
Addition in the labour force in the II Plan . . . . .	5.17
Total jobs required . . . . .	7.41
Jobs created . . . . .	4.10
Backlog at the beginning of the III Plan (1961) . . . . .	3.31
Addition in the labour force during III Plan . . . . .	9.80
Jobs required . . . . .	13.11
Jobs created . . . . .	5.62
Unemployment at the end of the III Plan (1965-66) . . . . .	7.49

*Source : Report of the Committee on Unemployment, Mysore Government—1971.*

On the basis of the above figures as well as the Employment Exchange data the Committee on Unemployment set up by the Government of Mysore in October, 1970 estimated the magnitude of unemployment as follows in its report submitted in 1971 :

	lakhs
A.— (i) Educated unemployed . . . . .	1.30
(ii) Education below S.S.L.C. or no education . . . . .	8.00
<b>TOTAL</b>	<b>9.30</b>
B.— (i) Rural sector . . . . .	7.74
(ii) Urban sector . . . . .	1.56
<b>TOTAL</b>	<b>9.30</b>

#### IV Characteristics of the unemployed of persons

(i) Age Group-wise distribution of unemployed persons ("Others" among non-workers) according to the 1971 Census is given in Table-12.

TABLE-12

*Percentage distribution of unemployed persons by sex, age group,  
rural-urban residence*

Age Group	All Areas			Rural			Urban		
	Male	Female	Persons	Male	Female	Persons	Male	Female	Persons
0-14 .	10.70	14.74	11.55	13.65	25.00	15.86	9.09	0.83	8.91
15-19 .	23.56	28.85	24.57	26.57	28.33	26.86	21.76	29.17	23.17
20-24 .	38.00	27.56	36.00	36.55	11.67	31.72	38.88	37.50	38.61
25-29 .	10.33	7.69	9.83	9.64	11.67	10.03	10.76	5.21	9.70
30-39 .	7.75	7.69	7.74	4.02	8.33	4.85	11.49	7.29	9.50
40-49 .	5.78	4.49	5.53	2.52	3.33	4.85	6.11	5.21	5.94
50-59 .	1.82	5.77	2.58	2.01	8.33	3.24	1.71	4.17	2.18
60 & above	1.82	3.21	2.09	2.41	2.33	2.59	1.47	3.13	1.78
Age not specified	0.15	..	0.1	..	..	..	0.24	..	0.20
All ages	80.83	19.17	100.00	82.37	16.83	100.00	80.99	19.01	100.00

Age sex specific incidence of unemployment cannot be computed from the 1971 data due to the non-availability of age-specific participation rates. Only 1961 Census data are available in this respect and are given in Table-13.

TABLE-13

*Age sex specific incidence of unemployment (1961 census)*

Age Group	All Areas			Rural			Urban		
	Persons	Male	Female	Persons	Male	Female	Persons	Male	Female
0-14 .	0.22	0.33	0.03	0.04	0.06	0.00	1.80	2.48	0.30
15-34 .	0.74	1.07	0.15	0.21	0.34	0.02	3.10	3.56	1.24
35-59 .	0.13	0.18	0.02	0.03	0.04	0.00	0.60	0.71	0.16
60 & above	0.07	0.07	0.03	0.01	0.01	0.00	0.04	0.04	0.03
All ages .	0.43	0.61	0.09	0.12	0.18	0.01	1.95	2.27	0.71

The incidence of unemployment was the highest in the age group 15-34, followed by the lower age group 0-14, in both the cases due to the new entrants, whose percentage among the unemployed was 80.7 in the urban areas during that census.

### (ii) Educational qualifications

Data on educational qualification of the unemployed persons categorised as "Others" among non-workers are available from 1971 Census in respect of those who were aged 15 or more. The same is given in Table-14.

TABLE-14

*Percentage distribution of "Others Non-Workers" males & females in rural and urban areas by educational levels*

Level of Education	Rural			Urban		
	Persons	Male	Female	Persons	Male	Female
1. Illiterate . . .	25.38	20.00	51.12	17.36	16.62	20.46
2. Literate below Primary . .	3.46	3.72	2.22	3.04	3.22	2.27
3. Primary . . .	7.31	8.37	2.22	11.93	12.87	7.95
4. Middle . . .	14.62	15.80	8.89	19.74	22.25	9.09
5. Matriculation or Higher Secondary . . .	41.15	42.79	33.33	36.44	34.05	46.59
6. Non-technical Diploma/Certificate not equal to Degree . . .	..	..	..	0.22	0.27	..
7. Technical Diploma/Certificate not equal to Degree . . .	0.77	0.73	..	2.17	2.68	..
8. Graduate Degree and above . . .	7.31	8.37	2.22	9.02	8.04	13.64
TOTAL . . .	100.00	100.00	100.00	100.00	100.00	100.00

In the urban areas, the last category, 'graduates and above' comprised of 6.7 per cent graduates and 0.4% post-graduates not having any technical degree and 2% graduates and above having technical degree (Engineering 1.08%, medicine 0.22%, agriculture and veterinary 0.22% and teaching 0.43%).

During the 1971 census a special card was issued for ascertaining the number of graduates and their labour force status. The cards were received from 1,17,079 men and 2,168 women. Out of the respondents, 12.06 per cent males and 21.22 per cent females reported to be unemployed. In Table No. 15 the percentage of the unemployed graduates by educational level and subjects is being mentioned.

TABLE-15

*Percentage distribution of Graduates reporting to be unemployed by subject field and level of education*

Subject field	Percentage of Unemployment by Subject Field												Total	
	Number of Persons Reporting to be Unemployed		Percentage of Unemployed among Respondents		Doctorate		Master/Post-Graduate		Bachelor's Equivalent		Certificate			
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female		
I. Arts & Humanities	3,072	2,093	8.61	20.05	0.70	0.10	6.54	10.50	92.84	89.11	0.46	0.24	0.09	
2. Commerce	1,123	81	12.83	25.63	...	...	2.67	1.24	96.88	92.59	0.45	6.17	..	
3. Agriculture	182	5	7.18	20.83	...	...	2.20	...	95.60	100.00	1.65	23.53	0.55	
4. Veterinary Science/Medicine	17	1	2.25	9.52	...	...	5.83	...	64.71	50.00	23.53	50.00	5.88	
5. Science	5,024	2,229	14.47	24.24	0.16	0.27	3.66	7.36	95.92	91.66	0.18	0.67	0.08	
6. Engineering & Technology	4,134	54	16.06	17.59	0.05	...	0.60	7.41	32.80	22.22	64.64	68.52	1.91	
7. Medicine (Allopathy)	295	63	6.86	6.86	0.67	...	2.37	4.76	90.88	92.00	4.75	1.59	1.36	
8. Medicine(others)	111	21	6.27	10.34	...	...	2.70	...	37.84	38.10	56.76	61.90	2.70	
9. Nursing	1	4	5.26	10.81	...	...	...	...	100.00	50.00	..	50.00	..	
10. Technical & Vocational Trades	114	24	8.64	30.37	1.75	...	1.75	...	8.77	8.34	28.07	58.33	59.66	
11. Others	51	26	7.08	17.93	..	..	13.73	7.69	21.57	11.55	47.05	65.38	17.65	
12. Total	14,129	4,602	12.06	21.22	0.11	0.17	3.29	8.56	75.28	88.53	20.11	2.39	1.21	
													0.35	
													100.00	

(Compiled from the data of 1971 Census-'G' Series)

Without knowing the stock of graduates and technical personnel it is not possible to determine the percentage of response and consequently the accuracy of the data. However, the data based on the response received provide a profile of unemployment in this section of population. The percentage of unemployed males was highest in the subject field of Engineering and Technology and in the subject field Technical and Vocational trade for females. In general women unemployed formed greater percentage of respondents, most probably because of the fact that response from the women in employment and not seeking and not available for work was less. Among unemployed persons 75.28 per cent of males and 88.53 per cent of females were graduates. Diploma holders among men and post-graduates among women were next in the order, but with a wide gap in-between.

The data on unemployment, among the persons qualifying in nursing do not appear to be presenting a correct picture.

(iv) In Table No. 16 the duration of unemployment is given by subject fields.



TABLE-16

*Percentage distribution of unemployed Graduates & Technical Personnel by duration of employment in 9 months  
(1971 Census)*

Subject Field	0-6		7-12		13-24		25 & above		Period not Specified	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1. Arts & Humanities	15.01	10.18	36.39	35.74	15.20	14.52	21.42	22.07	11.98	17.49
2. Commerce	18.23	18.52	39.00	46.91	15.14	7.41	16.48	13.58	11.13	13.58
3. Agriculture	10.99	20.00	47.25	20.00	20.33	20.00	13.74	20.00	7.69	20.00
4. Veterinary Science/ Medicine	23.53	..	35.29	..	17.65	..	23.53	50.00	..	50.00
5. Science	18.43	9.11	42.28	39.08	15.15	15.30	14.09	19.82	10.05	16.69
6. Engineering & Technology	14.49	5.56	29.56	38.89	17.61	22.22	28.81	14.82	9.53	18.51
7. Medicine (Allopathy)	39.32	33.33	26.10	14.29	13.22	12.70	8.14	7.93	13.22	31.75
8. Medicine (others)	25.23	14.29	20.72	33.33	11.71	28.57	30.63	14.29	11.71	9.52
9. Nursing	..	..	25.00	..	25.00	100.00	..	..	50.00	..
10. Technical & Vocational Trade	10.53	16.67	28.07	16.67	14.04	8.33	33.32	37.50	14.04	20.82
11. Others	21.57	19.23	25.49	19.23	13.73	15.38	29.41	15.38	9.80	30.78
12. Total percentage by duration	16.87	10.19	36.39	37.05	15.87	14.86	20.40	20.60	10.47	17.30

It may be noticed that among the unemployed persons who provided information about duration of their unemployment, the majority was in the duration range of 7 to 12 months. But almost one-fifth of them had been unemployed for more than 2 years. Among the latter category were almost one-third of males and slightly more than that of females who had qualified with technical and vocational trades. It is notable that about 31 per cent of the unemployed having qualified in medicine (others) had been awaiting job for more than two years. The percentage of unemployed women qualifying in Veterinary Science/Medicine was as high as 50.

#### (v) Incidence of unemployment by literacy

In his article "A Rational View of Census Economic Data" published in the Indian Journal of Industrial Relations—Vol. 8, No. 2 October, 1972. Shri J. N. Sinha has mentioned the percentages given in Table No. 17 in respect of the unemployed among labour force on the basis of the data from 1961 census. The persons covered belonged to the age group 15 and above residing in urban areas of Mysore.

TABLE-17

*Proportion of unemployed aged 15 and above in the total labour force by educational level in urban areas (1961 Census)*

Educational Level	Male	Female
Illiterate . . . . .	1·05	0·15
Literate without any educational level . . . . .	1·45	0·84
Primary . . . . .	3·49	2·71
Matriculates & above . . . . .	24·59	10·21

In the urban areas the percentage of the unemployed in the total labour force was 0.19 among male and 0.01 among female labour force.

#### (vi) Data on unemployment from the Directorate General of Employment and Training

In respect of unemployment, the D.G.E.&T. data relate to job seekers registered with Employment Exchanges and their placements. In Table-18 the data for the years 1966 to 1971 are indicated.

TABLE-18

*Average monthly registration & placement and applicants on the live register of Employment Exchanges at the end of the year*

Year	Average Monthly Registration	Average Monthly Place-ments	Percentage of Placement to Registration	No. of Ap-plicants on the Live Re-gister of Em-ployment Exchanges at the End of the Year	Percentage Change Over 1966 Figures
1966	16,855	1,415	8·40	1,47,962	..
1967	17,018	1,330	7·82	1,74,537	17·1
1968	16,469	1,662	10·09	1,96,686	32·9
1969	16,596	1,552	9·35	2,10,799	42·5
1970	15,433	1,236	8·01	2,40,731	62·2
1971	17,929	1,845	10·29	2,70,053	82·5

*Source : Directorate General of Employment & Training.*



The above data indicate the fact that although there has not been much change in the monthly average of job seekers getting registered with the Employment Exchanges for the last five years, the tight position in respect of job opportunities has been resulting into the backlog being brought forward year after year. The Committee on Unemployment set up by Mysore Govt. in October, 1970 mentioned in its report (1971) that about 40 per cent registrants could not be placed by the Employment Exchanges even after three years from the date of original registration. This backlog has been steadily raising the balance of the registered job seekers. The number of job seekers on 30th June, 1972 was 2,85,850 which was almost double of the number at the end of the year 1966.

There has been a constant rise in the number of educated persons (persons with qualification of S.S.L.C. and above) among the job seekers.

In Table No. 19 the break-down of the job seekers by educational standard is given for some of the years which provide evidence to this fact.

TABLE-19

*Percentage of educated job seekers among the applicants registered with Employment Exchanges*

Date & Year	Total Number of Job Seekers on the Live Re- gister	Percentage of Applicants by Educational Level			
		Below Matric	Matricu- lates	Higher Secondary, & above Inter- mediate	Graduates
31-12-1963	1,09,704	57.53	37.36	2.06	3.05
31-12-1968	1,95,686	52.09	30.65	13.03	4.23
31-12-1971	2,70,053	47.80	38.42	5.49	8.29
30-6-1972	2,85,850	45.90	39.76	5.76	8.58

The Employment Exchanges also provide data regarding distribution of the registrants by sex, age groups and educational standard. The information is available in respect of the registrants on the live register as on 31-12-1971, and has been included in Table No. 19. The total registrants numbering 2,70,053 comprised of 84.50 per cent male and 15.50 per cent female job seekers. Roughly one per cent of male and 53 per cent of female registrants belonged to the age group 20-24 years. The age group 25-34 claimed roughly 26 and 24 per cent of male and female job seekers respectively. The next age group having a significant percentage of job seekers of both the sexes was 15-19.

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TABLE-20

*Distribution of Total Deaths and Standard Deviations of Mortality Rate by Sex, Age Group and Period of Observation*

	Age Group	AGE GROUP									
		15-19 yrs.	20-24 yrs.	25-29 yrs.	30-34 yrs.	35-39 yrs.	40-44 yrs.	45-49 yrs.	50-54 yrs.	55-59 yrs.	Total No. of Persons
Male	15-19 yrs.	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	15-19 yrs.
Female	15-19 yrs.	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	15-19 yrs.
Male	20-24 yrs.	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	20-24 yrs.
Female	20-24 yrs.	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	20-24 yrs.
Male	25-29 yrs.	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	25-29 yrs.
Female	25-29 yrs.	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	25-29 yrs.
Male	30-34 yrs.	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	30-34 yrs.
Female	30-34 yrs.	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	30-34 yrs.
Male	35-39 yrs.	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	35-39 yrs.
Female	35-39 yrs.	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	35-39 yrs.
Male	40-44 yrs.	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	40-44 yrs.
Female	40-44 yrs.	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	40-44 yrs.
Male	45-49 yrs.	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	45-49 yrs.
Female	45-49 yrs.	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	45-49 yrs.
Male	50-54 yrs.	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	50-54 yrs.
Female	50-54 yrs.	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	50-54 yrs.
Male	55-59 yrs.	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	55-59 yrs.
Female	55-59 yrs.	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	55-59 yrs.
Male	Total	1.51	2.04	2.54	3.54	3.54	4.75	5.51	5.51	5.51	Total
Female	Total	1.11	1.41	1.41	1.41	1.41	1.41	1.41	1.41	1.41	Total
Male	Periods	14 Yrs.	18 Yrs.	22 Yrs.	26 Yrs.	30 Yrs.	34 Yrs.	38 Yrs.	42 Yrs.	46 Yrs.	Periods
Female	Periods	14 Yrs.	18 Yrs.	22 Yrs.	26 Yrs.	30 Yrs.	34 Yrs.	38 Yrs.	42 Yrs.	46 Yrs.	Periods
Male	Yrs.	14	18	22	26	30	34	38	42	46	Yrs.
Female	Yrs.	14	18	22	26	30	34	38	42	46	Yrs.
Male	No. of Persons	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	No. of Persons
Female	No. of Persons	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	No. of Persons

The degree holders among the job seekers consisted of men and women qualified in different subjects as mentioned in Table-21.

TABLE-21

*Number of Graduates and Post-Graduates job seekers by subject field.*

Subject Field	Graduates		Post-Graduates	
	Male	Female	Male	Female
(i) Arts . . . .	4,685	1,281	461	201
(ii) Science . . . .	6,438	1,535	584	109
(iii) Commerce . . . .	1,788	104	69	..
(iv) Engineering . . . .	2,401	9	39	1
(v) Medicine . . . .	396	51	3	4
(vi) Agriculture . . . .	250	..	3	1
(vii) Law . . . .	90	13	1	..
(viii) Education . . . .	346	256	11	7
(ix) Others . . . .	712	20	4	..
<b>TOTAL</b>	<b>12,131</b>	<b>3,296</b>	<b>1,175</b>	<b>323</b>

The above figures confirm the trend shown by the data tabulated from 1971 Census about the graduates and technical personnel mentioned in Table-22.

The distribution of the registrants on the live register as on 31-12-1971 by occupational group is mentioned in Table-22.

TABLE-22

*Percentage distribution of job seekers by occupational group.*

Occupational Group	नियमित जगत	Percentage of job Seekers
(1) Professional and Technical . . . .	7.21	
(2) Administrative, Executive and Managerial . . . .	0.03	
(3) Clerical, Sales, etc.	3.06	
(4) Agricultural, dairy and related works (except agricultural labour)	0.37	
(5) Miners and quarrymen . . . .	0.03	
(6) Transport and communication . . . .	1.26	
(7) Craftsmen & production process works . . . .	3.88	
(8) Service, sports and recreation workers (except watchmen, sweepers, etc.) . . . .	0.50	
(9) Persons without vocational training and experience :		
(i) Middle school standard and above but below matric . . . .	10.80	
(ii) Matric and above but below degree . . . .	41.39	
(iii) Graduates and above . . . .	5.86	
(10) Unskilled manual worker below degree . . . .	25.61	
	<b>TOTAL</b>	<b>100.00</b>

DGET data, although useful for manpower planning, do not provide any accurate assessment of the unemployment position, due to the incomplete coverage

of the State—specially rural areas, shyness or hesitation or indifference on the part of many in getting themselves registered on the one hand and duplication of registration and registration secured by the persons already in employment on the other. Attempts have been made in the past to determine these factors in order to estimate the prevailing unemployment. In the 18th Round of NSS (1963-64) it was estimated that about 44 per cent of the unemployed persons in the urban areas were registered with Employment Exchanges. In the 19th Round (1964-65) the corresponding percentage was calculated as 41.8% (according to the information supplied by the C.S.O. on the basis of quick tabulation to the study group set up by the National Commission on Labour-Study Group Report on Employment and Training 1969). A country-wide survey as on 1st August, 1968 disclosed that among the registrants the proportion of those already employed was 42.3 per cent, that of students 7 per cent, and that 34.4 per cent of the job seekers on the live register were from the rural areas. Those ratios had been applied by the Committee on Unemployment constituted by the Government of Mysore on 5th October, 1970, and on that basis, the Committee, in its report submitted in the year 1971, estimated that in December, 1970 the number of unemployed residing in urban areas was 1.56 lakhs.

The Committee estimated the number of unemployed persons with qualification equivalent to higher than matriculation as 1.30 lakhs on the assumption that a very high percentage of educated unemployed persons (with qualifications SSLC and above) were registered with the employment exchanges (Reference : Report of the Committee on Unemployment Mysore—1971-P. No. 6).

However, the ratios thus discovered do not have uniform applicability. The number and coverage of the Employment Exchanges has expanded during the last few years. There has been change in the attitude of the persons also. Hence, in the absence of any state-wide survey to re-establish these ratios, any accurate assessment is not possible on the basis of the Employment Exchanges data.

## VI. Special surveys :

1. The Directorate of Employment & Training, Mysore had conducted in the year 1966 Special Surveys in respect of 964 Trainees out from Industrial Training Institutes who were registered with Employment Exchanges in the State at the end of the year 1965 in order to find out the real incidence of unemployment among them.

The findings as per Report issued by the Directorate in 1967 were as follows :

(i) Only 83.5 per cent of the technical trainees registrants were unemployed. Their percentages were significant in Bangalore (23.8%), Hubli (19%), Kolar (11.1%) and Shimoga (9.8%). The trade significant for unemployment were Fitter (21.8%), Draughtsman Mechanical (17.1%), Electrician (10.8%), Welder (10.7%) and Draughtsman Civil (9.8%).

(ii) 17.9% of the applicants were not mobile, 37% reported state wide mobility, and 45.1% were willing to go anywhere in India.

(iii) The range of monthly salary wage expected by these registrants were Rs. 90-100 within the district of residence, Rs. 120-130 within the State and Rs. 150-200 all India mobility.

(iv) Of those applicants 27.8% were unemployed for less than six months and 30% for over twelve months.

2. The Directorate of Employment and Training, Mysore had conducted a similar survey of the Engineering Graduates on the live register of the Employment Exchange during October, 1966 and Jan., 1967. The Survey had a very limited coverage. In the Report published in 1968 the following significant findings have been mentioned.

The enquiry which was done on mail questionnaire have had only 41% response. Among the respondents only 46% registrants were unemployed. Among these 62 unemployed Engineers, 27.4% (*i.e.*, 17 Engineers) possessed a first class Engineering Degree. 41 of these sixty two unemployed Engineers had been waiting for a job for less than 6 months, 4 for the 6 months but less than one year and 17 for more than one year.

#### **Underemployment :**

The NSS 18th Round only provides some data on underemployment in urban areas of Mysore. The percentage distribution of persons employed by hours at work given in Table No. 23 indicates that 5.13 per cent employed persons worked upto 28 hours only in a week and 19% had work in the range of 28 to 42 hours in a week.

TABLE-23

*Percentage distribution of persons employed by hours at work*

Hours Worked	Sector I	Sector II	Mysore State	Table No. of Sample h.h.	No. of Persons
	1	2	3	4	5
Up to 1 hour	0.03	0.21	0.21	321	318
More than 1 hour upto 10 hours	0.34	0.75	0.16	..	..
More than 10 hours upto 21 hours	2.57	1.32	1.18	..	..
More than 21 hours upto 28 hours	1.52	2.02	2.31	..	..
More than 28 hours upto 35 hours	3.41	4.29	3.91	..	..
More than 35 hours upto 42 hours	10.67	16.43	5.63	..	..
More than 42 hours upto 50 hours	40.42	19.29	21.40	..	..
More than 50 hours upto 58 hours	10.22	19.09	17.03	..	..
More than 58 hours	25.23	20.14	13.43	..	..
Not Specified	1.99	3.03	2.63	..	..
Total	100.00	100.00	100.00	..	..

NOTE : All above figures are obtained by State Sample Survey.

Source : 118th Report No. 1 issued by the Bureau of Economics & Statistics, Government of Mysore.

It will be seen from the above data that underemployment was more in extent in Sector II town.

The above said NSS Report also indicates that in the industry group, services and constructions, there was more underemployment in terms of hours worked. However, in the absence of data in respect of additional hours for which such workers were available for extra work the extent of underemployment cannot be measured.

#### **The poverty approach :**

Rath and Dandekar, in "Poverty of India" estimated the percentage of rural and urban population in Mysore with inadequate intake of calories in the year 1961-62 as 26.98 and 57.09 respectively. The Federation of Indian Chambers of Commerce and Industry estimated that on 1st October, 1969, 41.3 per cent of the population of the State (numbering 11.3 million) was having annual per capita income of Rs. 569 and was below the poverty line (Planning for Results published by the Federation of Indian Chambers of Commerce & Industry). It has been observed that most of the urban poors are unemployed wage earners, mainly those who have migrated from the rural side in search of jobs. In the rural sector the bulk of the poor are the agricultural labourers who are only seasonally employed and small farmers.

In the year 1969-70, the NSS had conducted a Survey on such weaker section of population. The findings of the Survey (25th Round) are discussed in the subsequent paragraphs.

#### **25th Round of National Sample Survey :**

The Survey covered the lowest ten per cent of the small cultivator households and non-cultivating Wage Earner Households who formed the weakest section of the population. In all 6,89,371 persons (3,45,457 men and 3,43,914 women) of the former category and 18,51,543 persons (9,08,743 males and 9,42,800 females) of the latter had been covered. The interesting results are detailed below :

(i) In the Survey the Labour Force participation rate has been computed in terms of mandays of employment and mandays available for or seeking work as percentage of the total number of mandays of the reference week for all the members of these households. The data are set in Table-24.

TABLE-24

*Percentage of mandays with gainful activities or seeking gainful work in respect of small cultivators*

Age Groups	Small Cultivator Households			Non-cultivating Wage Earner Households		
	Male	Female	Persons	Male	Female	Persons
0—9 . .	2.2	5.6	3.9	0.3	1.9	1.1
10—14 . .	24.0	28.0	26.0	33.9	20.9	27.3
15—44 . .	91.5	59.4	75.1	96.2	68.0	81.3
45—59 . .	92.1	64.1	79.8	97.2	61.5	80.1
60 & above . .	55.4	18.9	36.8	75.4	35.7	52.1
All Ages . .	58.1	40.1	49.1	59.1	41.5	50.7

The data do not indicate much difference between the participation rate in the two sets of households. However, the participation rate in age group 0-9 is higher in case of small cultivator households, obviously because of the availability of work in own farms. Participation rate in case of male members of all the age groups excepting 0-9 and female members of the age groups 15 and above of the non-cultivating wage earner's households was higher than the participation rate in the corresponding age groups in small cultivators households. The percentage of mandays spent in work on own farm was 12.9 in case of small cultivator households as against 0.1 per cent in case of the other category of the households.

Self employment in non farm occupation and wage paid or salaried employment claimed a higher percentage of mandays of the members of the non-cultivating wage earner households.

Percentage of mandays devoted to attending educational institution was higher in case of non-cultivating wage earner households.

(ii) 37.4 per cent of the small cultivator households and 43.8 per cent of the households belonging to non-cultivating wage earners reported possibility of supplementing their income by taking up different ancillary agricultural activities. A majority of them preferred dairying. The ancillary activity getting next preference was poultry. However, 47% of the households of the first category and 45% of the households of the second category desired financial assistance of Rs. 1,000 and above for the purpose.

(iii) The percentage of the households reporting knowledge of trade/occupation in the two sets of the households is given in the Table-25.

TABLE-25

*Percentage of the households reporting knowledge of trade/occupation*

Trade/occupation	Small Cultivator Households	Non-cultivating Wage Earner Households
1. Manufacturing activities . . . . .	6.7	12.8
2. Trade . . . . .	70.0	64.5
3. Transport . . . . .	..	..
4. Services . . . . .	23.3	22.7
TOTAL . . . . .	100.0	100.0

The number of households reporting knowledge of some manufacturing activity was higher among the non-cultivating wage earner households. Among these households the majority reported knowledge of leather goods manufacturing and repairing. Caste-wise distribution of the households is not available, however, it appears that this phenomenon has an impact on the scheduled castes.

63.4 per cent of the small cultivator households and 71.2 per cent of the non-cultivating wage earner households desired to have financial assistance to the tune of Rs. 1,000 and above for taking up some non-agricultural activity.

The percentage of households having persons willing to take up regular full-time wage employment by location preference and net income desired is given in Table-26.

TABLE-26

*Percentage distribution of households having persons willing to take up full-time wage employment by location preference and expected income range*

Net-Income in Rupees	Small Cultivator Households				Non-cultivating Wage Household Earner				Total
	Within Village	Outside Village with Guaranteed Regular Employment	Outside Village without Guaranteed Regular Employment	Total	Within Village	Outside Village with Guaranteed Regular Employment	Outside Village without any Guaranteed Regular Employment		
1. Less than 299	0.5	0.4	0.2	1.1	0.7	0.3	0.2	1.2	
2. 300—599	2.6	1.3	0.3	4.2	3.9	1.8	..	5.7	
3. 600—999	7.7	4.3	1.6	12.0	9.3	5.3	2.6	17.2	
4. 1,000—1,999	11.3	6.4	..	19.3	11.7	5.9	..	18.1	
5. 2,000—3,999	1.4	2.3	..	3.4	1.4	0.7	..	2.1	
6. 3,000 and above	0.7	..	..	0.7	0.4	..	0.8	0.8	
TOTAL	24.2	14.4	2.1	40.7	27.4	14.4	3.3	45.1	

In 56.3 per cent of the small cultivators households and 54.9 per cent of the non-cultivating wage earner households no one was willing to shift to a full-time or regular employment other than what he was engaged in. Majority of them gave the reason that their present employment was adequate and economical. In the households of the former category, however, a good percentage (21.7 of the 59.3 per cent) no one could be spared from agriculture.

5. The percentage distribution of the persons willing to take up alternative employment by age, sex and educational level is given in Table-27.

TABLE-27

*Percentage distribution of persons willing to take up employment outside village by age, sex and educational standard*

Educational Standard	Percentage of Persons Willing to Go Out by Agegroup									Total Persons by Educational Standard
	0—9	10—14	15—44	45—59	60 and above	Male	Female	Male	Female	
<b>(A) HOUSEHOLDS OF SMALL CULTIVATORS</b>										
1. Illiterate	..	..	100.0	60.8	100.0	60.0	..	..	..	58.7 100.0
2. Literate but below Primary	..	..	50.0	..	13.1	..	13.3	..	..	14.4 ..
3. Primary	..	..	..	..	5.6	..	13.4	..	..	6.3 ..
4. Middle	..	..	50.0	..	12.1	..	13.3	..	..	13.5 ..
5. Secondary	..	..	..	..	8.4	..	..	..	..	7.1 ..
6. Above Secondary	..	..	..	..	..	..	..	..	..	.. ..
Total Persons by age group	..	..	2.4	14.3	86.5	85.7	11.1	..	..	100.0 100.0
Number	..	..	67.5	675	24525	4050	3150	..	..	28350 4725

Educational Standard	Percentage of Persons Willing to Go Out by Age Group										Total Persons by educational Standard
	0-6	10-14	15-44	45-59	60 and above						
<b>(B) NON-CULTIVATING WAGE EARNERS' HOUSEHOLDS</b>											
	Male	Fe-male	Male	Fe-male	Male	Fe-male	Male	Fe-male	Male	Fe-male	
1. Illiterate . . . . .	100.0	..	40.0	..	60.2	88.9	80.0	100.0	100.0	..	62.1 91.7
2. Literate below Primary . . . . .	..	..	..	..	18.4	11.1	..	..	..	..	15.5 8.8
3. Primary . . . . .	..	..	..	..	60.0	13.3	..	..	..	..	13.8 ..
4. Middle . . . . .	..	..	..	..	..	3.0	..	20.0	..	..	.. 4.3 ..
5. Secondary . . . . .	..	..	..	..	..	5.1	..	..	..	..	.. 4.3 ..
6. Above Secondary . . . . .	..	..	..	..	..	..	..	..	..	..	.. .. ..
Total Persons by age group	0.9	..	4.3	..	84.5	75.0	8.6	25.0	1.7	..	100.0 100.0
Total Number . . . . .	750	..	3750	..	73500	6750	7500	2250	1500	..	87000 9000

From the above table it will be seen that about 85 per cent of the male aspirants in both set of households and more than three-fourths women willing to take up employment outside their village belonged to the age group 15-44. The number of such men belonging to non-cultivating wage earner households was more than thrice of number of men of small cultivator households. Similarly the number of women opting to leave their village in the non-cultivating wage earner households was more or less twice of those from small cultivator households. In the non-cultivating wage earner households even children belonging to the age groups 0-9 and 10-14 were willing to go out of the village, most probably because of their non-attachment to any households enterprise and also due to the economic stringency which appears to have a greater impact on the non-cultivating wage earner households. Most of those persons in both the sets of households were illiterates. Only 27 per cent of men of the small cultivator households and 22 per cent men of the non-cultivating wage earner households had passed the primary or some higher examination. The percentage of the men having passed the secondary examination was only 7 and 4 (roughly) respectively. None had passed any higher examination.

In the small cultivator households, 24,075 men (85%) and 4,500 women (95%) willing to leave the village preferred employment on public works. Among the rest, 70 per cent (3,150 persons) opted for un-skilled manual works, 5 per cent (225 persons) for skilled manual work and 25 per cent (1,125 persons) for non-clerical non-manual work. Sixty-five per cent of them expected annual wages in the range of Rs. 801 to 1,200 and thirty per cent in the range of Rs. 1,601 to 2,000.

In the other set of households, roughly 78 per cent of men (67,500 in number) and 80 per cent women (7,500) were willing for employment on public works. Among the rest 46.4 per cent wanted unskilled manual work, 28.6 per cent manual skilled, 21.4 per cent non-clerical non-manual and only 3.6 per cent clerical work. Of the latter category (those not opting for employment on public works) seventy-five per cent expected annual wages in the range of Rs. 801 to 1,200, about twelve per cent in the range of Rs. 401 to Rs. 800, eleven per cent in the range of Rs. 1,201 to Rs. 1,600 and only 3.6 per cent expected a salary of Rs. 2,501 & above per annum.

## SUMMARY

The 1971 Census data reveal that the participation rate in Mysore was 35.81 per cent of the population of the State and 37.48 and 30.61 per cent of the rural and urban population respectively. These percentages were, of course, lower than the participation rate revealed by 1961 Census. It is apprehended that the workers who participated in labour force casually have not been included. Similarly the accurate number of unemployed persons is not ascertainable. The NSS estimates are also higher, being 41.18 per cent for the State, 45.62% for rural and 31.49% for urban areas.

The percentage of unemployed persons among 1971 population appears to be 0.28 in the State as a whole, and 0.13% and 0.71 per cent in the rural and urban population respectively. The extent of unemployment has thus risen during the last decade. The incidence of unemployment in the labour force, according to 1971 Census is 0.78 per cent in the State as a whole, 0.37 and 2.32 per cent respectively in the rural and urban labour force. In the urban areas of Mysore the incidence of unemployment in the female labour force is higher than that in the male labour force.

The NSS estimates of unemployment are higher, but they are not comparable with the 1971 Census estimates due to the difference in the concept and reference period.

The Committee on Unemployment set up by the Government of Mysore in 1968 has estimated that number of unemployed persons was around 9.3 lakhs in the year 1971 of which 7.74 lakhs were in the rural and 1.56 lakhs in urban areas. The number of educated unemployed was estimated to be 1.30 lakhs. The Employment Exchange data have been evincing a constant rise in the number of unemployed persons seeking job assistance from the exchanges.

However, the estimates revealed by the above said sources have no firm basis.

## ଓଡ଼ିଶା ଜ୍ୟୋତିଷ

### ORISSA

According to 1971 Census the population of Orissa was 2,19,34,827 with 1,10,28,036 men (50.28 per cent) and 1,09,06,791 women (49.72 per cent). The density of population was 141 per square kilometer. 91.73 per cent of the population resided in rural areas and 8.27 per cent in urban areas.

#### (I) Labour force :

##### I. Extent of Labour Force:—

###### (a) *Census Data :*

In 1971 Census the population was primarily classified as "Workers" and "Non-Workers" according to their major time-disposition activity being some gainful work or non-gainful engagement. However, in respect of the non-workers also information was sought about their subsidiary gainful activity, if any. The non-workers who did not have any specified non-gainful engagement and were reported to be seeking gainful work were included in the residuary category "Others". On the basis of these data the labour force as for 1971 Census has been computed and given in Table No. 1.

TABLE-1

*Workers and Non-workers in the Labour Force (1971 Census)*

Area & Sex	Number of Persons Categorised as Workers	Number of Non-Subsidiary workers having Gainful Activity	Total Number of Persons with Gainful Activity	Number of "Others" Among Non-workers	Total Number of Persons with Work and Seeking Gainful Work	Percentage of Persons with Work in Labour Force
<b>1. State</b>						
(a) Male	61,3708	3,200	61,31,908	63,400	62,00,308	56.22
(b) Female	8,26,332	3,03,600	11,29,932	6,100	11,36,032	10.42
(c) Persons	69,40,040	3,21,800	72,61,840	74,500	73,36,340	33.45
<b>2. Rural</b>						
(a) Male	56,18,257	16,700	56,34,957	57,900	56,92,857	56.67
(b) Female	7,67,280	2,95,500	10,62,780	5,400	10,68,180	10.60
(c) Persons	63,85,537	3,12,203	66,97,737	63,300	67,61,037	33.60
<b>3. Urban</b>						
(a) Male	4,95,451	1,500	4,96,951	10,500	5,07,451	51.74
(b) Female	59,052	8,100	76,152	700	67,852	8.16
(c) Persons	5,54,503	9,600	5,64,103	11,200	5,75,303	31.71

The data on labour force as for 1961 Census is given in Table-2.

TABLE-2

*Percentage of population in labour force (1961 Census)*

Area	Male	Female	Persons
Rural	61.19	27.39	44.16
Urban	58.24	13.17	38.10
State	60.99	26.58	43.78

The data emanating for 1971 Census and 1961 Census given in the Table Nos. 1 and 2 are not comparable due to the difference in concepts and reference period.

## (b) NSS data :

The data in respect of labour force in the State as a whole and rural and urban areas available from the various rounds of the National Sample Survey are set in Table No. 3.

TABLE-3

*Percentage of population in labour force as per N.S.S. data*

Survey Particulars	Person	Male	Female
<i>A. Estimates for the State as a whole</i>			
(i) NSS 19th Round (1964-65) (Report No. 173)	36.15	53.28	18.41
(ii) NSS 24th Round (1969-70) (Tables supplied by the Directorate of Economics & Statistics, Orissa State) . . . . .	33.98	51.37	15.99
<i>B. Rural Orissa</i>			
(i) NSS 19th Round (1964-65) (Report No. 173)	36.20	52.94	19.88
(ii) NSS 24th Round (1969-70) . . . . .	34.12	51.60	16.25
<i>C. Urban Orissa</i>			
(i) NSS 17th Round (1961-62) . . . . .	32.65	54.37	10.57
(ii) NSS 18th Round (1963-64) ଶ୍ରୀମତୀ ନଗନ୍ତି	31.07	49.05	10.68
(iii) NSS 19th Round (1964-65) (Report No. 173) (Report No. 163) . . . . .	36.10	53.86	15.48
(iv) NSS 20th Round (1965-66) . . . . .	33.49	52.17	11.51
(v) NSS 21st Round (1966-67) . . . . .	31.89	51.62	7.73
(vi) NSS 24th Round . . . . .	32.88	52.25	10.30
(vii) NSS 24th Round . . . . .	32.08	48.52	12.11

*Source :* NSS Report No. 127, 152, 163, 166, 173, 181 based on Central Samples and Tables for the 24th Round of NSS based on State Samples provided by the State Statistical Bureaux, Orissa.

The NSS data are not comparable with the data provided by the 1961 and 1971 Censuses primarily on account of the restricted reference period of a week in case of regular as well as casual or seasonal workers and consideration of the current status as against the usual status adopted by the Censuses. Because of these differences the NSS figures in respect of participation rates are bound to be lower.

2. Some characteristics of the labour force:—

(i) *Age sex specific participation rate:*

The latest data available from the 24th Round NSS (1969-70) are set in Table No. 4.

TABLE-4

*Age-Sex specific participation rate in rural urban Orissa*

Age Group	Rural		Urban	
	Male	Female	Male	Female
0-4	..	..	..	..
5-9	..	..	..	..
10-14	19.72	10.91	6.07	7.96
15-19	61.79	22.05	27.73	13.09
20-24	87.75	15.79	72.96	8.67
25-29	92.10	24.96	95.12	24.24
30-39	97.04	33.81	98.37	20.22
40-49	94.13	34.38	94.99	29.76
50-59	90.86	35.42	92.96	18.51
60 & above	62.16	15.85	57.24	11.79
All Ages	51.13	16.92	48.52	12.11

*Source :* 24th Round NSS State Samples : Results made available by the Bureau of Economics & Statistics, Orissa State.

The results indicate that the participation rate of children and old persons (60 and above) is quite significant in rural as well as urban areas of Orissa.

(ii) *Distribution of persons in labour force by sex, age group and educational standard :*

The sex-composition of the labour force is given in Table No. 5.

TABLE-5

*Percentage of male and female in labour force*

Survey Particulars	Rural		Urban	
	Male	Female	Male	Female
1961 Census	68.75	31.25	84.80	15.20
1971 Census	84.20	15.80	88.21	11.79
NSS—24 Round	76.27	23.73	82.95	17.05

The percentage distribution of persons in labour force according to sex, age group and educational standard as per latest available data (24th Round of NSS) is given in Table No. 6.

TABLE-6  
Percentage distribution of persons in labour force by sex, age group and educational standard :

Age Group	Number	Percentage	Number	FEMALE												
				Primary & below Primary	Primary	Secondary	Single & above Secondary	Married	Below Primary	Primary	Secondary	Highly Qualified	Qualified	Below Primary	Primary	Secondary
0-9	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
10-14	2,50,240	5.12	6.61	4.19	3.49	1.76	•	•	1,30,550	3.28	7.66	40.63	•	•	•	•
15-19	4,38,260	10.07	9.20	7.50	21.50	11.47	5.73	•	4,52,220	3.63	9.88	9.37	100.00	•	•	•
20-24	4,35,800	2.91	3.51	3.12	13.35	20.75	23.31	0.79	4,06,080	6.70	7.11	3.13	•	•	•	•
25-29	4,31,320	13.97	12.63	12.79	17.32	12.24	22.73	18.13	2,06,720	13.07	13.48	18.76	•	•	•	•
30-34	4,21,250	25.45	25.59	22.51	10.55	22.37	27.37	35.37	4,13,380	26.43	27.79	21.87	•	•	•	•
35-39	3,93,520	16.23	17.14	15.51	17.55	10.17	13.18	2,96,480	18.74	29.04	3.13	•	•	•	•	•
40-44	3,20,320	10.67	12.59	3.07	3.31	5.03	5.78	•	1,29,290	12.15	8.68	3.13	•	•	•	•
45 & above	2,73,820	5.54	5.32	6.19	4.31	7.73	3.39	18.18	72,330	4.93	5.36	•	•	•	•	•
TOTAL	43,33,640	100.00	10.32	37.87	5.52	4.43	1.64	0.31	15,19,120	100.00	96.96	2.86	0.18	•	•	•

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	U R B A N																
0—9	.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
10—14	.	5,940	1,61	3,87	2,71	..	..	..	..	6,804	8,95	9,25	10,00	..	..	..	..
15—19	.	17,820	4,82	8,02	3,97	7,74	4,80	1,17	..	7,452	9,80	10,45	8,90	..	..	..	..
20—24	.	39,636	10,72	9,60	11,24	12,63	12,40	9,53	5,82	3,672	4,83	2,04	20,00	..	..	33,33	25,00
25—29	.	55,756	14,82	6,73	15,79	19,96	16,80	18,09	11,64	14,688	19,32	20,89	14,44	..	..	..	8,33
30—39	.	1,30,572	35,31	38,25	29,46	29,94	31,60	44,91	53,96	19,656	25,85	23,28	33,33	..	12,50	33,33	66,67
40—49	.	73,656	19,92	17,77	24,04	17,51	24,20	14,20	15,87	13,500	17,76	17,98	13,33	..	75,0	33,33	..
50—59	.	28,620	7,73	6,88	7,36	5,96	3,60	10,51	7,94	6,696	8,81	10,45	..	..	12,50	..	..
60 & above	.	18,792	5,07	8,88	5,43	6,31	1,63	1,56	4,75	3,564	4,68	5,65	..	..	..	..	..
TOTAL	.	3,69,792	100,00	20,39	30,14	14,34	14,60	15,01	5,52	76,032	100,00	82,96	12,78	0,99	1,14	0,43	1,70

Source : 24th Round of NSS made available by the Bureau of Economics & Statistics, Orissa State.

## II. Underemployment : —

The information on the number of hours worked has been collected in different rounds of the NSS. In the Table No. 7 the latest available data based on the State Samples covered in the 24th Round (1969-70) are given. In the State 31.86 per cent of working population were not having full-time work and had worked for less than 49 hours in the reference period of a week.

TABLE-7

*Percentage of underemployed workers in Orissa*

**A. Percentage of under employed workers (those who worked for less than 49 hours during a week) to total workers to :**

(i) the rural male workers . . . . .	29.75
(ii) the rural female workers . . . . .	38.80
(iii) the urban male workers . . . . .	30.72
(iv) the urban female workers . . . . .	30.16

**B. Percentage of underemployed persons who worked for less than 28 hours :**

(i) in the rural male workers . . . . .	6.19
(ii) in the rural female workers . . . . .	12.15
(iii) in the urban male workers . . . . .	2.71
(iv) in the urban female workers . . . . .	5.41

**C. Percentage of under-employed persons who worked for more than 28 hours but less than 49 hours :**

(i) in the rural male workers . . . . .	23.56
(ii) in the rural female workers . . . . .	26.65
(iii) in the urban male workers . . . . .	28.02
(iv) in the urban female workers . . . . .	24.75

The number of persons who did not have full-time employment was more in rural areas than in urban areas, and more among female workers than among male workers. The number of workers who had work for less than 28 hours was, however, much smaller than that of those who worked for more than 28 hours but less than 49 hours. However, the data about the availability of these underemployed persons for the hours of additional work, the extent of underemployment cannot be computed.

## III. Unemployment :—

**1. Extent and incidence of unemployment :—**

**(a) Census data :**

As mentioned earlier in 1971 no specific question was asked to ascertain unemployment. Persons who did not report to have any gainful work as their major or subsidiary time disposition activity, who did not report to be mainly engaged in studies, household work, who could not also be classified as rentier, pensioner, beggar, vagrant, dependents—too young and old, inmates of the penal institutions and who reported to be seeking gainful work were classified as "Others" among non-workers.

In the Table No. 8 the number and percentage of the 'Others' among non-workers who, it is presumed, belong to the category of unemployed persons, are given.

TABLE-8

*Number and percentage of "Others" among non-workers in the population and labour force*

Particulars	All Areas	Rural	Urban
1. Number of 'Others' among non-workers :			
(i) Persons . . . . .	74,500	63,000	11,200
(ii) Male . . . . .	68,400	57,900	10,500
(iii) Female . . . . .	6,100	5,400	700
2. Per cent age of 'Others' in workers :			
(i) In population . . . . .	0.34	0.31	0.62
(ii) In labour force . . . . .	1.02	0.94	2.56
(iii) Females . . . . .	91.81	91.47	93.75
(iv) Males . . . . .	8.19	8.53	6.25
(v) In agriculture . . . . .	0.02	0.51	1.07
(vi) In non-agricultural force . . . . .	1.10	1.03	2.89
(vii) In Primary industry . . . . .	0.05	0.05	0.08
(viii) In secondary industry . . . . .	0.54	0.51	0.95

Soviet Russian Population Census 1970: China's Ethnic Minorities Identified from Religious Groups

In 1911, Grottoes, however, the Sodality were asked to retain the number of us, excepted, due to the fact that we were making job for the first time. The following year, 1912, Grottoes are given.

संस्कृत विद्यालय

Population of the United States as of April 1, 1950, Census

	$A_0$	$A_{01}$	$A_{02}$	$A_{03}$	$A_{04}$	$A_{05}$
1. Number of significant digits:						
(i) $P_{\text{eff}}$	+	+	+	+	+	7.0267
(ii) $\sigma_{\text{eff}}$	+	+	+	+	+	0.0037
(iii) $R_{\text{max}}$	+	+	+	+	+	903
2. Probabilities of random errors:						
(i) $P_{\text{eff}}$ > 0.999	+	+	+	+	+	0.02
(ii) $\sigma_{\text{eff}}$ > 0.99	+	+	+	+	+	0.07
(iii) $R_{\text{max}}$ > 900	+	+	+	+	+	0.59
(iv) $T_{\text{eff}}$ > 1.00	+	+	+	+	+	0.47
(v) $\mu_{\text{eff}}$ > 0.999	+	+	+	+	+	0.23
(vi) $\sigma_{\text{eff}}$ > 0.99	+	+	+	+	+	0.71
(vii) $R_{\text{max}}$ > 900	+	+	+	+	+	0.01
(viii) $\mu_{\text{eff}}$ > 0.999	+	+	+	+	+	0.52

Even though it is apprehended that "Others" category of 1971 Census does not account for all the unemployed persons the number of unemployed and the extent as well as incidence of unemployment indicated by 1971 Census are much more than those evinced by 1961 Census. (The extent and incidence mentioned in Table 8 have been calculated taking into consideration all ages. It will be more meaningful if the incidence is calculated for the persons above the age of 15, who mostly account for the labour force age group-wise distribution of workers according to 1971 Census is not available. According to 1961 Census this incidence was 0.29 per cent for male and 0.01 per cent female labour force in rural areas and 1.73 per cent and 0.34 per cent respectively for male and female labour force in the urban areas\*). The unemployment has been more pronounced in urban areas than in the rural areas.

(b) *The N.S.S. data :*

The NSS data about the extent and incidence of unemployment in the State as a whole and rural and urban areas separately are given in the Table Nos. 9 and 10. The data in the table are based on the current status prevailing during the reference of a week preceding the date of enquiry and have a restricted coverage of population in the age group 15 to 59 (both inclusive). The category includes those who were unemployed during the reference week, although they might have had work during other weeks.

\*Reference : J. N. Sinha : "A Rational View of Census Economic Data" published in "Indian Journal of Industrial Relations" Vol. 8 No. 2—October, 1972."

The data on unemployment in the State as a whole according to the 24th Round of NSS are given in the Table No. 10.

TABLE-10

*Extent and incidence of unemployment in Orissa State 24th Round of NSS—1969-70*

Particulars		Male	Female	Persons
1. Total population (estimated)	. .	1,03,13,436	99,76,228	2,02,89,664
2. Total labour force (estimated)	. .	52,98,432	15,95,152	68,93,584
3. Unemployed persons (number)	. .	57,620	25,948	83,568
4. Percentage of unemployed persons :				
(i) in the population	. . .	0.56	0.26	0.41
(ii) in the labour force	. . .	1.09	1.63	1.21
5. Sex-wise percentages of unemployed persons	. . . .	68.83	31.17	100.00

*Source :* Draft tables on the 24th Round of NSS (State Samples) availed by the courtesy of the Bureau of Economics and Statistics, Government of Orissa.

The NSS data on the extent and incidence of unemployment separately for urban and rural areas of Orissa are set in the Table-11.

TABLE-11

*Extent and incidence of unemployment in rural and urban areas of Orissa—  
NSS estimates*

Area	Particulars of NSS Round	Percentage of Unemployed Persons to the Population to the Labour Force					
		Male		Female		Persons	
		Persons	Persons	Male	Female	Persons	
Rural Areas	24th Round 1969-70	0.54	0.28	0.40	1.05	1.70	1.20
Urban Areas	19th Round 1964-65	2.51	4.64	3.59	4.74	23.35	9.92
Urban Areas	24th Round 1969-70	0.78	0.03	0.44	1.61	0.27	1.36
	21st Round 1966-67	0.60	0.26	0.44	1.10	2.52	1.34
	20th Round 1965-66	0.52	0.16	0.35	1.01	2.07	1.69
	19th Round 1964-65						
	(i) Report No. 163	0.60	0.29	0.46	1.15	2.52	1.37
	(ii) Report No. 173	0.60	2.06	1.28	1.11	13.31	3.55
	18th Round 1963-64	0.84	0.28	0.58	1.71	2.65	1.78
	17th Round 1961-62	1.15	0.29	0.77	2.11	2.75	2.36

The data in respect of rural areas have so much of variation that it is difficult to arrive at any factual estimates. The data in respect of urban areas, however, evince some consistency. Only the Report No. 173 of 19th Round present somewhat different picture because of the difference in concept in the scheduled concerned, the unemployed included those who, although not seeking employment, had reported themselves available for work.

## 2. Some characteristic of unemployed persons :—

### (i) Age and sex-wise distribution of persons belonging to the category "Others" among non-workers :

The age group and sex-wise distribution of persons categorised as "Others Non-Workers" as per 1971 Census is cited in the Table No. 12.

TABLE-12

*Percentage distribution of male and female Non-Worker Others by age group  
1971 Census*

Age Group	State		Rural		Urban	
	Male	Female	Male	Female	Male	Female
0-14 .	11·70	34·43	12·43	38·89	7·62	..
15-19 .	28·95	26·23	29·36	24·07	26·67	42·86
20-24 .	36·11	6·56	36·96	3·70	31·43	28·56
25-29 .	10·82	6·56	10·54	5·56	12·38	14·29
30-39 .	4·97	14·75	4·84	14·81	5·71	14·29
40-49 .	3·07	4·92	2·42	5·56	6·67	..
50-59 .	2·48	1·64	1·90	1·85	5·71	..
60 & above .	1·61	4·91	1·21	5·56	3·81	..
Age not specified .	0·29	..	0·34	..	..	..
TOTAL .	100·00	100·00	100·00	100·00	100·00	100·00

It may be noticed that majority of women in the other category in rural areas belonged to the age group 0-14 years. The break-up of the age group 0-14 are not available. However, it can be presumed that most of them belonged to the age near about 14 years. In the urban area there was no female "Others" in this age group and the majority of women in the category belonged to the age group 15-19. Among males the majority in rural as well as urban areas belonged to the age groups 20-24 followed by the age group 15-19. Thus the bulk of the persons in the category others were below 25 years and were obviously new entrants. The data of 1961 Census and the NSS data also confirm this fact.

#### (ii) Distribution by educational level and age group :

The 1971 Census data are available in respect of the age group 15 and above and have been set in the Table No. 13.

In the 1971 Census enquiry was made through mail questionnaire method from the graduates about their engagement and attitude towards work. 48,844 graduates responded. They composed of about 89 per cent men and 11 per cent women. The number of the graduates reporting themselves to be unemployed and their distribution by subject field is given in Table No. 14.

TABLE-13

*Percentage distribution of non-workers categorised as others aged 15 and above by age group and educational level*

Educational Level	Number of Persons		Percentage of Persons Categorised "Others" in 1971 Census																	
			15-19		20-24		25-29		30 and Above		Age not Specified		Total							
	Persons	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male						
1. RURAL Total	•	•	•	•	•	54,000	50,700	33,54	39,39	42,21	6,06	12,03	9,09	11,83	45,46	0,39	..	100,00		
2. Illiterate.	•	•	•	•	•	7,800	5,500	2,300	19,00	46,15	4,67	50,03	6,55	66,67	40,00	93,33	..	10,85	69,70	
3. Literate below Primary	•	•	•	•	•	5,700	5,500	2,00	15,88	7,69	6,07	..	3,28	..	21,67	6,67	..	10,85	6,06	
4. Primary	•	•	•	•	•	4,600	4,600	..	14,12	..	4,21	..	8,20	..	13,33	..	..	9,07	..	
5. Middle	•	•	•	•	•	17,43	17,13	3,00	31,71	33,03	15,92	..	30,34	..	15,03	..	..	33,73	9,09	
6. Matric or Higher Secondary	•	•	•	•	•	17,000	15,600	4,00	25,29	23,08	45,33	5,00	31,15	..	10,00	..	50,00	..	32,74	
7. Non-Tech. Diploma or Certificate not equal to Degree	•	•	•	•	•	..	..	..	..	..	..	..	..	..	..	..	..	..		
8. Tech. Diploma or Certificate not equal to Degree	•	•	•	•	•	600	600	..	..	..	..	..	..	..	..	..	..	..		
9. Graduate and above	•	•	•	•	•	900	800	100	..	..	..	..	..	..	..	..	..	..		
1. URBAN Total	•	•	•	•	•	10,700	10,000	700	28,00	42,86	34,00	28,56	15,00	14,79	23,00	14,79	..	..	100,00	
2. Illiterate	•	•	•	•	•	1,800	1,700	100	14,29	..	11,76	50,00	..	..	..	..	..	..	..	
3. Literate below Primary	•	•	•	•	•	1,600	1,500	100	14,29	..	11,76	..	13,33	..	..	..	..	..	..	
4. Primary	•	•	•	•	•	700	700	..	7,14	..	11,76	..	20,00	..	..	..	..	..	..	
5. Middle	•	•	•	•	•	2,600	2,500	190	35,71	33,33	25,48	..	..	..	..	..	..	..	..	
6. Matriculation or Higher Secondary	•	•	•	•	•	3,000	2,800	200	28,57	66,67	29,42	..	..	..	..	..	..	..	..	
7. Non-Tech. Diploma or Certificate not equal to Degree	•	•	•	•	•	..	..	..	..	..	..	..	..	..	..	..	..	..	..	
8. Tech. Diploma or Certificate not equal to Degree	•	•	•	•	•	100	100	..	..	..	..	..	..	..	..	..	..	..	..	
9. Graduate Degree other than Tech	•	•	•	•	•	300	200	100	..	..	2,94	50,00	6,67	..	..	..	..	..	..	..
10. Post Grad. Degree other than Tech	•	•	•	•	•	100	..	..	..	..	..	..	..	..	100,00	..	..	..	..	
11. Tech. Degree or Diploma equato Degree	•	•	•	•	•	200	..	..	..	..	..	..	..	..	..	..	..	..	..	

SOURCE : 1971 Census—Supplement—Paper No. 1.  
'B' Series data.

TABLE-14

*Percentage distribution of graduates reporting to be unemployed by subject field and level of education*

Subject Field		Number of Persons Reporting Unemployment	Percentage of Unemployed Respondents	Percentage of Unemployed Graduates by Level of Education								Total	
				Doctorate		Master/Post Graduates		Bachelor or Equivalent		Diploma			
				Male	Female	Male	Female	Male	Female	Male	Female		
1. Arts and Humanities	.	1,845	608	87.94	17.12	..	..	18.43	25.33	81.36	73.35	0.05	
2. Commerce i.	.	195	7	8.19	36.84	..	..	9.47	14.29	90.26	85.71	..	
3. Agriculture	.	8	..	0.85	..	..	..	12.50	..	..	12.50	..	
4. Veterinary Science)/Medicine	.	109	..	16.39	..	..	..	..	..	96.33	..	3.67	
5. Science	.	1,195	224	12.57	18.83	..	..	11.88	30.22	88.12	76.34	..	
6. Engineering and Technology	.	852	4	12.34	14.81	..	..	0.82	..	22.54	50.00	69.37	
7. Medicine (Allopathy)	.	181	39	8.65	9.54	..	..	1.10	..	92.83	97.44	4.97	
8. Medicine(Others)	.	13	..	6.47	..	..	..	..	..	46.15	..	38.46	
9. Nursing	.	1	1	6.25	1.12	..	..	..	..	..	100.00	..	
10. Tech. and Vocational Trade	.	24	2	11.71	40.00	..	..	4.17	..	12.50	..	33.33	
11. Others	.	19	5	4.99	13.16	..	..	..	..	..	36.94	40.00	
12. Total	.	4,442	890	89.00	11.00	..	..	11.63	23.60	72.36	74.49	14.11	
13. Percentage of respondents reporting unemployment by level of education	.	..	..	..	..	..	..	8.17	20.29	10.34	16.03	14.44	
												9.09	
												6.75	
												12.50	
												..	

Source : Data compiled from "G" Series—Census 1971 (Draft).

In Table No. 15 the percentage distribution of unemployed graduates and technical personnel by duration of

**TABLE-15**  
*Percentage distribution of unemployed graduates and technical personnel by duration of unemployment*

Subject field	Duration of Unemployment in months									
	0-6		7-12		13-24		25 above		Period not specified	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1. Arts and Humanities . . .	9.43	9.05	29.97	17.27	15.99	11.02	14.20	15.46	30.41	47.20
2. Commerce . . .	12.31	..	19.49	14.29	12.48	14.29	11.28	42.85	37.43	28.07
3. Agriculture . . .	..	25.00	..	..	..	..	37.50	..	37.50	..
4. Veterinary Science	11.93	..	22.94	..	34.86	..	11.93	..	18.34	..
5. Science . . .	12.55	12.50	31.33	23.21	17.91	12.95	7.95	15.18	27.36	36.16
6. Engineering & Technology . . .	11.97	..	14.79	25.00	21.13	..	29.93	50.00	22.18	25.00
7. Medicine (Allopathy) . . .	22.10	25.65	30.94	30.76	13.26	10.27	6.08	2.50	27.62	30.76
8. Medicine (Others) . . .	..	..	23.08	..	7.69	..	23.08	..	46.15	..
9. Nursing . . .	..	100.00	..	..	..	..	..	..	..	100.00
10. Technical & Vocational Trades . . .	8.33	..	25.00	50.00	29.83	..	16.67	50.00	29.17	..
11. Others . . .	15.79	..	10.53	..	15.79	20.00	10.53	..	47.36	80.00
12. Total percentages by duration . . .	11.14	10.45	27.49	12.33	17.96	11.46	15.08	15.17	28.03	43.59

Source : G Series data obtained from the Registrar General of India.

The data given in Tables 14 and 15 are, however, incomplete in the absence of information about the total stock of graduates and technical persons. Unless the data on the distribution of population by educational standard and subject fields is published the percentage of response cannot be ascertained and the data obtained through the special cards cannot be properly utilised.

The NSS data for 24th Round of NSS in respect of the distribution of unemployed population by educational standard and the incidence of unemployment by educational standard is given in the Table-16.

TABLE-16

*Extent and incidence of unemployment by educational standard 24th round of NSS (1969-70)*

	Rural				Urban			
	Percentage of Unemployed Persons		Incidence of Unemployment		Percentage of Unemployed Persons		Incidence of Unemployment	
	Male	Female	Male	Female	Male	Female	Male	Female
Illiterate . . .	31.58	94.74	0.68	1.68	1.82	..	0.14	..
Literate but below Primary . . .	47.37	5.26	1.32	3.12	34.55	..	1.84	..
Primary . . .	15.79	..	2.56	..	1.82	..	0.20	..
Middle . . .	5.26	..	1.26	..	21.82	..	2.40	..
Secondary . . .	..	..	..	..	23.64	..	2.53	..
Graduate and above . . .	..	..	..	..	15.35	100.00	4.76	8.33
Total . . .	100.00	100.00	1.95	1.71	100.00	100.00	1.61	0.14
Estimated Number of Unemployed Persons . . .	51,580	25,840	..	..	5,940	108	..	..

*Source :* 24th Round NSS—Manuscript tables made available by the Bureau of Economics & Statistics, Orissa.

In rural Orissa the incidence of unemployment was the highest among the males who were literate but had not passed any examination. In the urban areas the incidence was the highest among the men and women who had passed graduation or above degree examination.

Similar data from 1971 Census cannot be computed due to the non-availability of the age group-wise distribution of the persons in the labour force.

#### Employment exchange data on unemployment:

Employment Exchanges provide data on unemployment to the extent of the persons seeking registration with them for placement. The rise or fall in the number of these registrants is a rough indicator of the employment situation. In the Table No. 17 data in respect of the average monthly registration, placement and the number of registrants at the end of the year are given.

TABLE-17

*The 'Unemployment situation as per Employment Exchange statistic*

Year	Average Monthly Registration	Average Monthly Place- ment	Percenta- ge of Pla- cement to Registration	Registrants on Live Register at the End of the Year	Present Change Over 1966
1966 . . . . 13,853	1,545	11.15	86,675	100.00	
1967 . . . . 13,198	1,255	9.51	94,250	108.74	
1968 . . . . 11,547	889	7.70	91,090	105.09	
1969 . . . . 12,229	889	7.27	1,22,560	141.40	
1970 . . . . 12,383	1,022	8.25	1,50,063	173.13	
1971 . . . . 16,086	1,251	7.78	1,85,132	213.59	
1972 . . . . 15,251	7,062	46.30	2,07,868	239.82	

*Source : Directorate General of Employment & Training.*

It may be seen that the employment situation had not been satisfactory during the years 1967 to 1971 and the number of job seekers desiring the assistance of the employment exchanges has been constantly and steadily increasing, so much so that the percentage rise in the number of registrants was 240 in between 1966-1972.

Out of the registrants on the live register on 31st December, 1971, the women formed only 2.91 per cent. In the Table No. 18 the percentage distribution of the male and female registrants by age group and educational qualifications is being given :—

TABLE-18  
*Percentage distribution of the registrants on the live register of employment exchanges as on 31st December, 1971 by sex, age group and educational standard.*

Educational Standard	MALE										FEMALE									
	Age Group in Completed Years										Age Group									
Upto 14 Years	15—19	20—24	25—34	35—44	45—54	All Ages	Total No. of Persons	Upto 14 Years	15—19	20—24	25—34	35—44	45—54	55 & Above	Total No. of Persons	Upto 14 Years	15—19	20—24	25—34	35—44
1. Below Middle School Standard .	56.64	41.35	41.32	51.68	52.70	64.83	61.54	43.59	78.345	41.38	44.33	50.90	40.64	60.56	100.00	..	52.70	2,841		
2. Middle School Standard .	39.54	28.23	26.00	20.91	29.63	26.29	30.76	25.86	46.483	55.17	15.39	12.17	7.32	1.41	..	..	12.39	668		
3. Matriculation .	3.65	26.66	24.11	16.38	12.02	6.13	3.85	22.83	41.039	13.45	35.04	17.20	5.15	2.82	..	..	20.42	1,101		
4. Higher Secondary, Intermediate/Under Graduates .	..	2.12	3.81	1.49	1.00	0.44	..	2.93	5.269	..	3.02	2.78	1.22	0.70	..	..	2.56	138		
5. Graduates .	0.17	1.64	4.66	7.57	3.89	2.31	3.85	4.39	7.897	..	2.22	9.22	28.05	23.24	..	..	9.98	538		
6. Post Graduates .	..	..	0.10	1.97	0.70	..	..	0.40	710	..	..	0.63	9.62	11.27	..	..	1.95	105		
7. Total .	0.34	22.36	57.18	15.93	3.56	0.63	0.00	100.00	1,79,741	0.54	35.12	52.74	13.69	2.63	0.28	100.00	100.00	5,391		

Source : D.G.E. & T., New Delhi.

The number of graduates and post graduates by subject field is indicated in the Table No. 19.

TABLE-19

*Number of Graduate and Post-Graduate by subject field, (As on 31st December, 1971)*

Subject Field	Graduates		Post-Graduates	
	Male	Female	Male	Female
Arts . . . . .	3,190	164	277	50
Science . . . . .	2,298	109	270	16
Commerce . . . . .	480	..	32	..
Engineering . . . . .	654	..	7	..
Medicine . . . . .	376	66	1	..
Agriculture . . . . .	43	..	5	..
Law . . . . .	36	1	6	1
Education . . . . .	798	195	75	38
Others . . . . .	22	3	37	..

Source : D.G.E.&T., New Delhi.

The figures in the table No. 19 reflect the same picture as that emanating from the 'G Series' data given in Table No. 14.

#### IV. The poverty approach :

Rath and Dandekar in "Poverty in India" estimated the percentage of rural and urban population in Orissa with inadequate intake of Calaries in the year 1961-62 as 43.88 and 55.57 respectively. The Federation of Indian Chambers of Commerce and Industry have similarly estimated that on 1st October 1969, 64.7 per cent of the population of Orissa numbering about 13.4 million had an annual income of Rs. 546 and were below the poverty line. (Planning for Results, published by the Federation of Indian Chambers of Commerce & Industry). The persons concerned, according to this report, were unemployed wage earners in the urban areas, and in the urban areas they were mainly migrants from the rural side in search of job. In the rural areas the bulk of the poor belonged to the agricultural labour class whose employment is only seasonal and the small cultivators.

#### V. Special surveys :

25th Round of National Sample Survey.

In the year 1969-70 during its 25th Round the National Sample Survey had conducted a survey in the rural areas on such weaker section of population covering the lowest ten per cent of the small cultivator households and non-cultivating wage earner households.

The survey covered 10,12,200 persons belonging to small cultivator households (employing of 5,09,400 men and 5,02,800 women), and 19,87,400 persons (9,72,800 men and 10,14,600 women) belonging to non-cultivating wage earner households for data on employment and unemployment in rural areas. The interesting results are mentioned in subsequent paragraphs.

(i) Sex Age-specific participation rates in the two sets of households are given in the Table No. 20.

TABLE-20

*Age sex specific participation rates in small cultivator and non-cultivating wage earner households*

Age Group	Small Cultivators Households			Non-cultivating Wage Earner Households		
	Male	Female	Persons	Male	Female	Persons
0-9 . .	2.6	3.0	2.7	2.3	1.5	1.9
10-14 . .	24.6	16.8	26.2	27.0	1.35	25.2
15-14 . .	78.2	30.4	53.9	86.7	36.7	60.2
45-59 . .	82.2	34.1	58.9	87.6	32.1	56.5
60 & above .	75.6	27.0	46.2	77.4	30.0	46.9
All ages .	47.9	20.6	34.4	51.7	23.7	37.5

(ii) Extent and incidence of unemployment in the two sets of the households computed as percentage of the mandays of unemployment to the total mandays in labour force is given in the Table No. 21.

TABLE-21

*Age sex specific extent and incidence of unemployment in small cultivator and non-cultivating wage earner households*

Age Group	Small Cultivator Household Non-Cultivating Wage Earner Households						Male		Female		Total	
	Male		Female		Total		Male		Female		Total	
	E	I	E	I	E	I	E	I	E	I	E	I
0-9 . .	..	..	0.1	3.3	0.1	3.7	..	..	..	..	..	..
10-14 . .	0.6	1.7	..	..	0.3	1.2	..	..	1.6	11.8	0.7	2.8
15-44 . .	0.6	0.8	0.0	0.0	0.3	0.6	1.3	1.5	0.1	0.3	0.6	1.0
45-59 . .	0.9	1.1	0.4	1.2	0.7	1.2	..	..	..	..	..	..
60 & above .	1.9	2.5	..	..	0.8	1.7	0.8	1.0	..	..	0.3	0.6
All ages .	0.4	0.8	0.0	0.0	0.3	0.9	0.5	1.0	0.2	0.8	0.4	1.1

NOTE : E—Extent of unemployment (percentage of the mandays of unemployment to the total mandays).

I—Incidence of unemployment (percentage of the mandays of unemployment to the total mandays in labour force).

The above data is in term of available mandays, and unemployment includes the mandays available for work reported by persons having same employment as well as those who are without any job and are thus unemployed.

(iii) Data on average rate of earnings per manday by employees of different sex-age groups engaged in agricultural and other occupations indicate that the average earning per day was more in case of non-cultivating wage earner household, being Rs. 1.86 for male labour Rs. 1.132 for female labour against Rs. 1.76 and Rs. 1.18 earned by their counterpart in the small cultivator households.

(iv) 75 per cent of the small cultivator households indicated no possibility of supplementing their income. Out of the remaining households, the majority expressed preference for dairying and poultrying. However, 26 per cent of the households wanted financial assistance to do so. Nine per cent of the households reported knowledge of any trade or occupation. Among them 66 per cent had knowledge of trading in grains and grocery stores and were willing to take them up for supplementing their income provided financial assistance was available.

Among the non-cultivating wage earner house-holds 27.4 per cent only were hopeful of supplementing their income by taking up ancillary activities. Majority among them preferred dairying. Among them 57.9 per cent desired to have financial assistance of Rs. 500 or more.

79 per cent of the non-cultivating wage earner households reported knowledge of any trade/occupation, or manufacturing. Roughly 14 per cent of these households desired to have financial assistance for undertaking non-agricultural activities.

(v) In 53.9 per cent of the small cultivator households and 55 per cent of the non-cultivating wage earner households there were persons willing to take up regular full time wage employment. Their distribution by location preference and by household total net income is given in the Table No. 22 .

TABLE-22

*Percentage of households reporting willingness (of any member) to take up regular full time employment by location preference and by household total net income*

Net income (in Rupees)	Small Cultivator Household				Non Cultivating Wage Earner Household				Total
	Outside Village	With- in Village	Guar- anteed out	Total	With- in Vill-	With- in Gauran-	With- in Gauran-	Total	
1	2	3	4	5	6	7	8	9	
1. less than 299	.	0.2	0.2	0.2	0.6	1.1	..	..	1.1
2. 300—599	.	3.6	1.2	0.9	5.7	5.2	1.4	0.9	7.5

	1	2	3	4	5	6	7	8	9	
3. 600—999	.	.	10·3	6·2	2·8	19·3	9·5	6·8	5·4	21·6
4. 1000—1999	.	.	12·9	8·2	4·8	15·9	9·8	9·1	3·6	22·5
5. 2000—2999	.	.	0·7	0·8	0·4	1·9	0·9	0·5	0·5	2·0
6. 3000 & above	.	.	0·2	0·3	..	0·5	0·2	0·2	..	0·4
TOTAL	.	27·9	16·9	9·1	53·9	26·6	18·4	10·4	55·0	

The remaining 46.1 per cent of small cultivator household and 45 per cent of non-cultivating wage earner households were not willing to take up any alternative employment, most of them considered their present employment adequate.

The percentage distribution of the persons willing to take up employment outside village by sex, age and educational standard is given in Table No. 23.



TABLE-23

*Percentage distribution of the persons willing to take up employment outside the village by age group, sex and educational standard.*

Educational Standard	AGE GROUP												Total	
	0-9		10-14		15-44		45-59		60 & Above					
	M	F	M	F	M	F	M	F	M	F	M	F		
<i>Non-Cultivating Wage Earner:</i>														
<i>Household:</i>														
1. Illiterate	..	..	66.67	..	61.64	100.00	61.11	100.00	..	..	..	61.85	100.00	
2. Literate below Primary	..	..	11.11	..	30.82	..	22.22	..	..	..	..	28.90	..	
3. Primary	..	..	22.22	..	4.11	..	16.67	..	..	..	..	5.36	..	
4. Middle	..	..	..	..	2.74	..	..	..	..	..	..	2.31	..	
5. Secondary	..	..	..	..	0.69	..	..	..	..	..	..	0.58	..	
6. Above Secondary	..	..	..	..	..	..	..	..	..	..	..	..	..	
<b>TOTAL</b>	..	5.20	..	84.39	91.67	10.41	8.33	..	..	..	100.00	100.00		

B. Small Cultivating :—  
*Households* :

1. Illiterate . . .	100.00	..	50.00	100.00	59.40	90.00	81.40	100.00	80.00	..	62.16	91.67
2. Literate below Primary . . .	.	..	33.33	..	27.44	10.00	16.18	..	20.00	..	26.13	8.33
3. Primary . . .	.	..	11.11	..	6.02	..	2.32	..	..	..	5.71	..
4. Middle . . .	.	..	5.56	..	5.64	..	..	..	..	..	4.80	..
5. Secondary . . .	.	..	..	..	..	1.50	..	..	..	..	1.20	..
6. Above Secondary . . .	.	..	..	..	..	..	..	..	..	..	..	..
<b>TOTAL</b> . . .	<b>0.30</b>	..	<b>5.41</b>	<b>8.33</b>	<b>79.88</b>	<b>83.34</b>	<b>12.91</b>	<b>8.33</b>	<b>1.50</b>	..	<b>100.00</b>	<b>100.00</b>

The percentage of educated persons to the persons willing to take up work outside the village was more in the non-cultivating wage earner households.

In the small cultivator households, roughly 84 per cent of such men and 67 per cent of women opted for employment in public works. The corresponding percentages among the persons of the other set of the households were 85 for male and 100 for female.

The remaining persons opted for other employments as per percentages given in Table No. 24.

**TABLE-24**  
*Percentage distribution of persons opting for works other than public works outside their village by nature of job*

Nature of Employment	S.mall Cultivator Households	Non-Cultivator Wage Earner Household
1. Clerical . . . .	3·51	7·69
2. Non Clerical non-manual . . . .	17·54	11·54
3. Manual Skilled . . . .	33·34	53·85
4. Unskilled . . . .	45·61	26·92
5. Total . . . .	100·00	100·00
6. No. of Persons . . . .	22,800	49,400

Majority of these persons desired to have income of above Rs. 801 or above per annum.

## VI. SUMMARY

The broad findings in respect of unemployment and underemployment are furnished in the Table No. 25.

**TABLE-25**  
*Latest available data on the extent of unemployment and underemployment in Orissa:*

Source of Data	Particulars	All Areas	Rural	Urban
<b>A—UNEMPLOYMENT</b>				
1971 Census . . .	Percentage of 'other workers' :			
	(i) To the total population	0·34	0·32	0·62
	(ii) To the labour force	1·02	0·94	2·56
24th Round of NSS (1969-70) . . .	Percentage of unemployed persons :			
	(i) To the total population	0·41	0·40	0·44
	(ii) To the labour force	1·21	1·20	1·36
<b>B—UNDEREMPLOYMENT</b>				
24th Round of NSS	Percentage of underemployed workers (persons who had work for less than 49 hours in the reference week).			

1	2	3	4	5
<b>In the working population :</b>				
	(i) Male workers	29.75	30.72	
	(ii) Female workers	38.80	30.16	
<b>Percentage of chronically under employed workers :</b>				
(Persons who had work for less than 28 hours in a week).				
	(i) In the male working force	6.19	2.71	
	(ii) In the female working force	12.15	5.41	

The data, however, are inadequate and do not lead to any firm conclusions.

### **PUNJAB**

#### **1.0 Population :**

According to the provisional population totals, the population of Punjab State was 13.47 millions, area 50.0 thousand square k.m.s., and density 268 persons per square k.m. The rate of population growth was 21.00 per cent during the decade 1961-71 as against 21.56 per cent during 1951-61. During the decade 1961-71 the rates of increase in population in the rural and urban areas were 19.82 and 24.92 per cent respectively.

#### **2.0 Working Population :**

Working population comprises of persons gainfully employed in some productive work. An idea of the volume, magnitude and other characteristics of the working population is normally obtained from the decennial censuses. Due to constant changes in the definition and concept of the working population, the volume of the working population so obtained from censuses are not comparable. The worker participation rates indicate the proportion of working population to the total population. The worker participation rates obtained from the censuses count are also not comparable on account of change in the concept and definition of the 'worker' adopted from census to census. However, to appreciate the volume, magnitude and characteristics of the working population or for that matter the worker participation rates in proper perspective, it is necessary to know the concepts and definitions adopted in the censuses. In the 1961 Census, a person was regarded as a "worker" if he had some regular work of atleast one hour a day throughout the greater part of the working season in the case of seasonal activity like cultivation, livestock, dairy-ing, household industries, etc. A household industry was treated as such even if its products were not sold in the market. In the 1971 Census, however, a person was regarded as a "worker" if his/her main activity was participation in any economically productive work by his/her physical or mental activity. Work involved not only actual work but effective supervision and direction of work. If a person participated in any regular work on any one of the days preceding the week in the case of regular work and last one year in the case of seasonal work like cultivation live-stock keeping, plantation work, etc., then such a person was regarded as a "worker". The working population and its share to the total population as observed from 1971 Census formed 28.81 per cent—52.50 per cent of the male population and 1.67 per cent of the female population.

2.1 Working population and its distribution among different occupations as observed from the 1971 Census were as given in Table No. 1 below :

TABLE-I  
*Percentage distribution of workers as cultivators agricultural labourers and other workers according to the 1971 census*

Census	Area	No. of workers (in millions)	Percentage Distribution of Workers as						Other Workers					
			Cultivators			Agricultural Labour								
			P	M	F	P	M	F	P	M	F			
1971	.	T	3.88	3.78	0.10	42.75	43.84	3.73	20.03	20.30	0.28	37.22	35.86	86.19
	R	2.98	2.92	0.06	53.97	54.96	6.10	24.75	24.92	16.56	21.28	20.12	77.34	
	U	0.90	0.86	0.04	5.53	5.80	0.50	4.34	4.50	1.28	90.13	89.70	98.22	

### 3.0 Urban labour force statistics :

The urban labour force surveys were introduced in the NSS 16th Round. Prior to that round, more detailed questions were asked for both the rural and the urban employed and unemployed enquiries. In view of the consideration that the economic activities in urban areas were likely to be more organised, a simplified set of questions was asked for the urban areas since the 16th Round of NSS.

The percentage distribution of urban population by labour force status as observed in the different rounds of NSS is given in Table No. 2 below :

TABLE-2

Round	Sex	Employed		Unemployed		Outside Labour Force
		At Work	Not at Work	New Others Entrants	..	
17th (Sept., 61 July, 62)	M	43·73	1·24	0·40	0·52	52·28
	F	4·43	0·25	0·05	0·00	93·82
	P	26·17	0·80	0·24	0·29	70·85
18th (Feb., 63—Jan., 64)	M	41·56	1·54	0·12	0·13	54·35
	F	3·51	0·33	..	..	92·30
	P	24·12	0·98	0·06	0·07	71·74
19th (July, 64—June, 65)	M	45·94	1·07	0·18	0·16	52·08
	F	5·68	0·11	0·05	..	93·34
	P	27·31	0·62	0·12	0·09	71·18
20th (July, 65—June, 66)	M	40·37	0·41	0·34	0·34	58·54
	F	6·01	0·08	..	0·16	93·67
	P	24·82	0·26	0·19	0·26	74·43
21st (July, 66—June, 67)	M	46·62	0·45	0·20	0·19	52·53
	F	5·10	0·05	0·02	..	94·73
	P	27·56	0·27	0·12	0·10	71·90

### 4.0 Demand for and supply of engineering manpower :

On the basis of the available material, the Directorate of Economics and Statistics, Government of Punjab, has compiled and published a report dealing inter-alia with all important aspects of engineering manpower, *viz.* development of engineering education and its present facilities, students wastage in engineering colleges and polytechnics, present stock of engineering manpower and its pattern of employment and unemployment and supply of and demand for graduates and diploma engineers in the State during the 4th and 5th Plan periods. The study was, however, confined to personnel who needed institutional training for a diploma or degree in engineering.

Since the estimates regarding stock, supply and demand for engineering personnel are based on various assumptions, the results reproduced below are

only tentative. The broad findings and recommendations of the study were as follows :

1. There are two engineering colleges in the State imparting education in the traditional faculties of civil, mechanical and electrical engineering. There is also agricultural engineering college set up in the campus of Punjab Agricultural University, Ludhiana. Besides, there are eight polytechnic institutes which are running diploma courses in engineering.

2. Intake capacity of the two engineering colleges during 1970-71 was 360 which was equally distributed amongst the civil, mechanical and electrical faculties.

3. The seating capacity of the eight polytechnics during 1968-69 was 1,320. In addition to regular diploma courses in civil, mechanical and electrical engineering, there were also arrangements for part-time diploma courses in electrical and mechanical engineering in two institutes.

4. Actual intake in the Agricultural Engineering College came down from 119 in 1965-66 (*i.e.*, the year of start of the college) to 27 in 1969-70 and 22 in 1970-71.

5. Student wastage works out to 4.11 per cent of the total admissions in the engineering colleges and 13.48 per cent of the total admissions in the polytechnics.

6. The estimated stock of graduate and diploma engineers in the State on the eve of the Fourth Plan was 10,568. Out of these engineers 6,641 were employed in the State Government Departments, Punjab State Electricity Board, Punjab Agricultural University and Pepsu Road Transport Corporation.

7. Unemployed engineers constituted 10 per cent of the total stock of engineers in the State on the eve of the Fourth Plan. At the all India level the proportion of unemployed engineers to the total stock was higher (17.1 per cent) than in Punjab. The waiting period in case of majority of the unemployed graduate engineers on the Live Register of the Employment Exchanges in the State was less than six months. Only a little more than 10 per cent of them had been waiting for employment for more than one year.

8. The total stock of engineering manpower (graduate and diploma engineers) in the State is expected to increase from 10,568 on the eve of the Fourth Plan to 13,447 at the end of the Fourth Plan and 15,531 at the end of the Fifth Plan.

9. Job opportunities will have to be provided to 1,757 graduate engineers and 3,189 diploma engineers during the Fourth Plan. Supply during the Fifth Plan is estimated at 1,274 graduate engineers and 2,102 diploma engineers. In case the supply exceeds the demand for these personnel during the Fourth Plan, there would be a backlog of unemployed engineers at the end of the Fourth Plan which would inflate the Fifth Plan supply to that extent.

10. The supply and stock figures given in the foregoing paragraphs do not include agricultural engineers. Supply of such personnel has started flowing in the State with the commencement of the Fourth Plan. It is estimated that 171 agricultural engineering graduates would be available for employment in Punjab during the Fourth Plan. Their tentative supply during the Fifth Plan is estimated at 120.

11. According to a tentative estimate 924 graduate engineers and 2,143 diploma engineers would be absorbed in the public and private sectors in the

State during the Fourth Plan. The bulk of the demand relates to the State Government and Semi-Government sectors. Private sector is expected to absorb only 58 graduate engineers and 165 diploma engineers during the Fourth Plan period.

12. Since the supply would be outstripping the demand, it is expected that there would be a surplus of 833 graduate engineers and 1,046 diploma engineers at the end of the Fourth Plan. The only course which can be expected to alter this situation is the promotion of self-employment opportunities for engineering personnel.

13. The job opportunities likely to be available during the Fifth Plan would almost match the fresh entrance of engineers in the labour market during that period. It may, perhaps, be difficult to make dent into the backlog of unemployed personnel unless concerted efforts are made to exhort them to seek productive occupation on their own.

14. As regards agricultural engineers, it is expected that 90 such personnel would be absorbed in the public sector during the Fourth Five Year Plan. This demand constitutes just half the supply of these personnel during the Fourth Plan. The rest of the personnel would have to avail of the facilities being extended for self-employment in the State.

### 5.0 Employment exchanges data :

Employment Exchanges statistics continue to provide a regular source of data on urban unemployment. Despite their inherent limitations, these data broadly reflect the trends in urban unemployment over a period of time. The employment exchanges statistics for the State are furnished below :

#### 5.1 Registration, etc. :

The number of applicants registered, placed, still on live registers, vacancies notified and filled during the last five years is given in the Table No. 3.

TABLE 3

(Figures in lakhs)

Year	Regis- tration	Placing	Live Register at the end of the Year	Vacan- cies notified	Vacan- cies Filled
1	2	3	4	5	6
1966	. . .	1·45	0·25	0·51	0·40
1967	. . .	1·63	0·25	0·59	0·39
1968	. . .	1·74	0·29	0·72	0·44
1969	. . .	1·87	0·32	0·85	0·41
1970	. . .	1·87	0·30	0·97	0·43

#### 5.2 Occupational distribution of registered unemployed

The occupational distribution of the applicants on the live register of the

employment exchanges as on 31st December, 1971 was as given in Table No. 4 below :

**TABLE-4**  
*Distribution of applicants on live register on 31-12-1971 by occupation group*

Particulars of Occupation	Number	Perce- ntage to Total
(i) Professional, Technical and Related Workers . . .	24,232	20.07
(ii) Administrative, Executive and Managerial Workers . . .	553	0.46
(iii) Clerical, Sales and Related Workers . . .	10,479	8.68
(iv) Agriculture, Dairy and Related Workers . . .	609	0.50
(v) Miners, Quarrymen and Related Workers . . .	3	..
(vi) Workers in Transport and Communication Occupations .	7,261	6.02
(vii) Craftsman and Production Process Workers . . .	4,775	3.96
(viii) Services, Sport and Recreation Workers . . .	9,451	7.83
(ix) Labourers with Work Experience not elsewhere Classified . . . . .	15,688	12.47
(x) Persons without Professional or Vocational Training or Previous Experience (total "a" to "g") . . .	47,690	39.51
(a) Graduates in Arts . . . .	5,888	4.88
(b) Graduates in Science . . . .	2,179	1.81
(c) Graduates in Commerce . . . .	218	0.18
(d) Matriculates/Under Graduates . . . .	19,417	16.09
(e) Medical School Standard . . . .	4,015	3.33
(f) Literates-Others . . . .	11,395	9.44
(g) Workers without Occupation . . . .	4,578	3.79
Total (i) to (x) . . .	1,20,711	100.00

#### 6.0 25th round of NSS :

The 25th Round of NSS was canvassed primarily to study the economic conditions of the weaker-section of the rural population. As is the practice, all the States except those of West Bengal, Nagaland and Himachal Pradesh participated in the work of NSS on a full matching basis. The design was self-weighting at the State level. It was mainly a stratified two-stage one.

The first stage units were villages which were selected circular systematically with equal probability in the form of two independent inter-penetrating sub-samples and the second stage units were households within the selected villages. In all 8,784 villages were selected for the Central sample and 8,136 villages for the State sample.

In each selected village all the households were divided into three-sub-strata, *viz.*,

- (i) households having no cultivated land,

- (ii) the lowest 10 per cent of the households having cultivated land, and
- (iii) remaining households.

The households deriving more or less regular and major income in the last year from self-employment in trade establishments, manufacturing, mechanised transport, professions or rent or salaried employment were excluded from both sub-strata (i) and (ii) but were included in the sub-strata (iii). On an average from each sub-strata about two sample households were selected. The weaker section of the rural population comprised of two groups (i) small cultivator households of sub-strata & (ii) non-cultivating wage earner households of sub-strata (i). Separate schedules *viz.*, schedule Nos. 16.1 and 16.2 in respect of small cultivator households and non-cultivating wage earner households respectively were canvassed.

Among the various and common items of information collected, analysed and published on a priority basis pertained to the following :

- (i) Time disposition during the reference week of all the members of the household along with their demographic particulars as well as the earnings of the wage earners during the same period,
- (ii) Possibility of supplementing the income of household from ancillary agricultural and non-agricultural activities, and
- (iii) Willingness of the members of the household to move outside the village in the event of regular full time wage employment being offered to them particularly in public works.

The results presented below pertain to the State sample for all the sub-samples combined. The results are provisional and subject to revision.

#### 6.1 Employment and unemployment:

The percentage distribution of estimated number of mandays spent per week in different types of economic and other activities by persons belonging to various age and sex groups were as given in Table No. 5 (attached).

The Table No. 5 shows that the proportion of mandays available and seeking for work was practically negligible (0.21 per cent) in the case of small cultivator households as compared to the non-cultivating wage earner households (3.71 per cent). The table also shows that among females in both the groups *i.e.*, small cultivator households and non-cultivating wage earner households the proportion of mandays spent in seeking and/or available for work was nil. The table also shows that the proportion of mandays spent or worked in own farm was 22.4—39.3 for males and 3.1 for females—in the small cultivator households as compared to 0.5—0.3 for males and 0.7 per females—in the case of non-cultivating wage earner households. Conversely, the proportion of mandays spent or worked in other farm for salary and wages was much larger in the case of non-cultivating wage earner households *i.e.*, 19.5—31.2 for males and 5.2 for females—than the small cultivator households 4.3—7.1 for males and 1.2 for females. Similarly, the proportion of mandays spent/worked in non-farm occupations was 1.7—2.3 for males and 0.8 for females—in the case of small cultivator households than the non-cultivating wage earner households proportion of 6.6—9.9 for males and 2.7 for females.

TABLE-5

*Percentage distribution of estimated number of man-days spent per week under different types of economic and other activities by persons belonging to various age sex groups*

		<i>Females</i>				<i>Females</i>			
		1.	2.	3.	4.	5.	6.	7.	8.
1.	Worked in farm . . .	1.6	8.7	8.2	5.7	4.7	..	3.9	8.4
2.	Worked in non-farm occupation . . .	..	1.7	1.3	..	0.8	..	2.7	4.0
3.	Did not do any work other than (i) & (ii)	98.6	98.4	89.6	90.5	94.3	94.0	99.0	93.4
(i)	Seeking and/or available for work . . .	..	..	..	..	..	..	..	..
(ii)	Not available for work due to illness, leave, etc.	1.4	..	..	..	..	0.5	1.0	..
	<b>TOTAL . . .</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

		<i>Persons</i>				<i>Persons</i>			
		1.	2.	3.	4.	5.	6.	7.	8.
1.	Worked in farm . . .	0.3	13.3	44.7	50.9	39.5	27.0	..	9.7
2.	Worked in non-farm occupation . . .	..	1.0	2.3	3.7	1.4	1.7	..	6.3
3.	Did not do any work other than (i) & (ii)	97.2	82.0	50.6	39.6	44.7	67.6	98.9	81.9
(i)	Seeking and/or available for work . . .	..	..	0.2	0.4	0.8	0.2	..	0.5
(ii)	Not available for work due to illness, leave, etc.	2.5	3.7	1.9	5.4	13.6	3.5	1.1	1.6
	<b>TOTAL . . .</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source : N.S.S.—25th Round.

## 6.2 Earnings :

The average rate of earnings per manday by employees of different sex, age groups engaged in agriculture and other occupations separately for small cultivator households and non-cultivating wage earner households were as given in Table No. 6 (attached).

The Table No. 6 shows that the average rate of earnings of all non-employed was more i.e., Rs. 4.72 per manday worked—Rs. 4.95 for males and Rs. 3.13 for females—in the case of non-cultivating wage earner households than the small cultivator households i.e., 4.41 per manday worked—Rs. 4.73 for males and Rs. 1.26 for females. None of the female was engaged in non-farmed occupation as non-self-employed in the small cultivator households. The average rate of earnings per manday for those who worked in other farms for salary or wages was less i.e., Rs. 4.29 than for those who worked in non-farm occupations as non-self-employed i.e., Rs. 5.80 in the case of small cultivator households. The corresponding average earnings in the case of non-cultivating wage earner households were Rs. 4.74 and Rs. 4.65 respectively.

TABLE-6

*Average rate of earning per manday by employees of different sex, age group engaged in agricultural and other occupations*

Age Group in Years	Small Cultivator Household			Non-Cultivating Wage Earner Households			
	Average Earning per Manday in Rupees			Average Earning per Manday in Rupees			
	For those who Work- ed in other Farms for Salary or Wages	For those who Work- ed in Non- Farm Occupation as Non- Self- Employed	For all Non- Self- Employed	For those who Work- ed in other Farms for Salary or Wages	For those who Work- ed in Non- Farm Occupation as Non- Self- Employed	For all Non- Self- Employed.	
1	2	3	4	5	6	7	
	<i>Male</i>			<i>Male</i>			
1. 0—9	..	..	..	..	..	..	..
2. 10—14	2.63	3.00	2.64	2.92	2.47	2.80	
3. 15—44	5.08	7.50	5.21	4.97	5.84	5.14	
4. 45—59	5.14	4.87	5.02	5.20	4.38	5.01	
5. 60+	4.33	..	4.33	5.20	2.88	4.74	
TOTAL	4.63	5.80	4.73	4.91	5.13	4.95	

1	2	3	4	5	6	7
	<i>Female</i>			<i>Female</i>		
1. 0—9	..	..	..	..	..	..
2. 10—14	..	..	..	3·71	2·86	3·37
3. 15—44	0·58	..	0·58	3·09	2·43	2·93
4. 45—59	3·57	..	3·57	4·69	1·47	3·65
5. 60+	..	..	..	1·72	..	1·72
<b>TOTAL</b>	<b>1·26</b>	..	<b>1·26</b>	<b>3·48</b>	<b>2·21</b>	<b>3·13</b>
	<i>Persons</i>			<i>Persons</i>		
1. 0—9	..	..	..	..	..	..
2. 10—14	2·63	3·00	2·64	3·06	2·58	2·92
3. 15—44	4·60	7·50	4·74	4·76	5·38	4·89
4. 45—59	4·62	4·87	4·71	5·11	3·63	4·74
5. 60+	4·33	..	4·33	5·02	2·88	4·61
<b>TOTAL</b>	<b>4·29</b>	<b>5·80</b>	<b>4·41</b>	<b>4·74</b>	<b>4·65</b>	<b>4·72</b>

*Source :* N.S.S.—25th Round.

## RAJASTHAN

### 1.0 Population growth :

According to the provisional population totals for 1971 Census, the population of Rajasthan State was 25.72 millions, area 342 thousand square k.ms. and density 75 persons per square k.m. The rate of population growth was 27.6 per cent during the decade 1961-71.

### 2.0 Working population :

Working population comprises of persons gainfully employed in some economically productive work. An idea of the working population is normally obtained from the decennial censuses. But due to changes in the definition and concept of the "worker" the volume of the working population so obtained from censuses are not comparable. In the 1961 Census, a person was recorded as a "worker" if he had some regular work of atleast one hour a day throughout the greater part of the working season in the case of seasonal activities like cultivation, live-stock rearing, dairying, household industry, etc. In 1971 Census, however, a person was recorded as a "worker" if his main activity was participation in any economically productive work by his physical or mental activity.

The working population, according to the 1971 Census was 8.29 millions, with 7.01 million men and 1.28 million women. They formed 32.22 per cent of the total population—52.13 per cent of the male population and 10.42 per cent of the female population.

The working population and its distribution among different occupations as observed from the 1971 Census was as given in Table No. 1 below :

TABLE -1

*Percentage distribution of workers as cultivators, agricultural labourers and other workers according to the 1971 census separately in respect of each sex*

State	Sex	Percentage of Agricultural and other Workers to Total Workers		
		Cultivators	Agricultural Labourers	Workers other than Cultivators & Agricultural Labourers
		1971	1971	1971
1	2	3	4	5
RAJASTHAN	Persons . . . . .	63.59	9.10	27.31
	Male . . . . .	65.27	7.54	27.19
	Female . . . . .	54.38	17.60	28.02

72.21 per cent of the working population in rural areas and 12.10 per cent of the working population in urban areas was engaged in cultivation and 12.01 per cent of the rural working population and 3.50 per cent of the urban working population was engaged as agricultural labourers. 15.78 per cent of the rural workers and 84.40 per cent of the urban workers were engaged in work other than cultivation and agricultural labour.

The percentage of workers engaged in cultivation varied from 51.31 in district Pali to 87.36 in district Churu, while in the urban areas, it varied from 3.35 in district Ajmer to 40.0 in district Udaipur. The percentage of rural agricultural labourers varied from 3.82 in district Churu to 22.65 in district Sirohi while in urban areas it varied from 1.37 in district Jaipur to 7.26 in district Pali. The variation in percentages of workers other than cultivators and agricultural labourers ranged from 7.20 in rural areas of district Banswara to 28.27 in district Sirohi and from 53.13 in urban areas of district Udaipur to 94.83 in district Ajmer.

### 3.0 Urban labour force surveys :

The NSS, since its 16th Round, have been undertaking urban labour force surveys throughout the country. The data on employment and unemployment are collected by following the labour force approach.

The data so collected and analysed are given in Table No. 2 below :

TABLE - 2  
*Percentage distribution of Urban Population by labour force status, sex, under different rounds of NSS :*

Round No.	Sex	Employed		Unemployed		Out-side Labour Force
		At Work	Not at Work	New Ente- rants	Others	
17th (Sept., 61—July, 62)	M	15.46	1.65	0.51	0.59	51.45
	F	12.81	0.46	0.13	0.07	85.97
	P	29.86	1.09	0.33	0.35	67.77
18th (Feb., 63—Jan., 64)	M	43.40	2.70	0.23	0.28	52.45
	F	10.16	0.56	0.08	0.15	87.40
	P	27.58	1.68	0.16	0.22	69.08
19th (July, 64—June, 65)	M	42.17	1.91	0.40	0.36	54.97
	F	11.32	0.71	0.07	0.07	82.62
	P	27.70	1.35	0.25	0.22	70.28
20th (July, 65—June, 66)	M	41.93	1.86	0.40	0.30	55.31
	F	14.28	0.50	..	0.02	84.72
	P	28.46	1.20	0.20	0.16	69.64
21st (July, 66—June, 67)	M	43.91	0.97	0.27	0.33	54.42
	F	16.03	0.61	..	0.06	83.22
	P	30.25	0.80	0.14	0.20	68.52

#### 4.0 Employment :

The employment position in Rajasthan at the end of March and 1966 was as given in Table 3 below :—

TABLE - 3  
*Total employment according to Public Sector and the Private Sector*

Particulars	Period Ending	
	March, 1961	March, 1966
<b>A. Employment (in lakhs)</b>		
(a) Public Sector . . . . .	3.4	4.2
(b) Private Sector . . . . .	0.9	0.9
<b>TOTAL</b> . . . . .	<b>4.3</b>	<b>5.1</b>
<b>B. Employment in Public sector (in thousands) branch wise.</b>		
(i) Central Government . . . . .	113.1	125.6
(ii) State Government . . . . .	167.9	202.1
(iii) Quasi-Government . . . . .	13.3	26.1
(iv) Local bodies . . . . .	48.5	61.0
<b>TOTAL</b> . . . . .	<b>342.8</b>	<b>414.7</b>

### 5.0 Employment of children :

With a view to studying the extent and vocations of employment of children between the age group 6-14 years, the Directorate of Economics and Statistics, Government of Rajasthan conducted a survey in 1962. The main objectives of the survey were :

1. To estimate the proportion of the children in the age group 6 to 14 being employed in the rural and urban areas separately.
2. To find the impact on such employment of the size of the household, the economic conditions of the household, the educational standard of the households, castes, occupation of the households and the availability of education facilities in the villages.
3. To find out various vocations in which employment is provided to the children of the age group of 6 to 14 and to determine the percentage distribution of such employed children in different vocations.
4. To ascertain the earnings of such employed children and their contribution to the average income of the family.

### 5.1 Coverage :

The study was undertaken in typical localities both in the urban and rural areas. The urban areas selected were Rajgarh, Bhilwara, Pali towns and the rural areas selected were Jhotwara and Kherwara community development blocks in Jaipur and Udaipur districts.

### 5.2. Design and sample size :

One per cent of the households in each of the selected three towns and twenty households from each of the five villages from each of the two community development blocks were selected at random.

### 5.3 Results of the survey :

The sample reflected that in the urban areas 22.48 per cent of the population and in the rural areas 18.70 per cent of the population was in the age group of 6-14. The population in age group 6-10 was 15.65 per cent and 14.12 per cent for urban and rural areas respectively.

It was estimated that out of the children of age group 6-14 in Rajgarh 13.3 per cent, in Bhilwara 45.9 per cent and in Pali 29.3 per cent, were not attending schools. The corresponding percentage in respect of children of age groups 6-10 and 11-14 separately were 12.5 and 14.3 in Rajgarh, 46.0 and 42.9 in Bhilwara, and 38.6 and 6.9 in Pali respectively.

The estimated percentage of children not attending schools in the age group 6-14 was 28.2 in Jhotwara and 86.23 in the Kherwara Blocks. Here again the corresponding percentages for the age groups 6-10 and 11-14 were 27.2 and 33.3 for Jhotwara and 84.5 and 91.3 for Kherwara.

The survey revealed that in Rajgarh no child of the age group 6-14 was employed while in Bhilwara and Pali it was estimated that out of the children not attending schools, in this age group, 13.0 per cent and 10.3 per cent respectively were employed. The percentage of employed children was very high (91.2 per cent) in Jhotwara Block and in Kherwara Block it was 6.4 per cent.

It was estimated that per capita annual earnings of such employed children were Rs. 347 for Bhilwara, Rs. 447 for Pali, Rs. 93 for Jhotwara and Rs. 132 for Kherwara.

On the whole, about 10 per cent of children of age group 6-10 were having some employment, whole-time or part-time. The children in this age group did not attend school in the rural areas because, school facilities were not available in the village, and in the urban areas mostly because of the financial difficulties, the low income and large size of families.

#### **6.0 Unemployment and underemployment :**

In order to assess the magnitude of unemployment as also the extent of underemployment in rural areas, the Directorate of Economics and Statistics, Government of Rajasthan started conducting rural surveys on employment, unemployment and underemployment from June, 1963.

#### **6.1 Objectives :**

The main objectives of the survey were :

- (a) to give an adequate picture of the extent of employment, unemployment and underemployment in the rural areas of the State;
- (b) to enable a periodical assessment of the information collected on those characteristics of individuals which have a bearing on the problem of unemployment.

#### **6.2 Coverage :**

The survey undertaken in June, 1963 was spread over the entire rural area of the State.

#### **6.3 Stratification :**

The entire rural area of the State was divided into seven strata on the basis of crop pattern, population density and continuity of the districts.

#### **6.4 Sample design :**

The sample design adopted was a rotating two-stage stratified random sampling where villages and households constituted the first and second stage sampling units respectively and each selected village was surveyed four times in a year after an interval of three months. The households within each selected village were further stratified into three strata *viz.*, cultivators, agricultural labourers, and others (non-agricultural labourers). Six households of cultivators, four of agricultural labourers and two of others were selected by the method of linear systematic sampling.

#### **6.5 Concepts :**

The concepts and definitions adopted in the survey were :

- (a) *Labour force*.—The labour force comprised of all persons who were either gainfully employed or were looking for gainful employment. It consisted, in other words, of all persons employed or unemployed. It was thus a measure of the economically active population, activity in the sense of engagement in or availability for the production of goods and services.

(b) *Full employment.*—A person was considered to be fully employed if he was in labour force and the total hours worked by him were equal to the total hours he was available for gainful work in the reference period.

(c) *Unemployment.*—If the number of hours worked by a person in the labour force was zero in the reference period and was available and seeking work, he was considered as completely unemployed.

(d) *Underemployment.*—If the number of hours available for gainful work in the reference period was greater than the number of total hours worked, the person was deemed to be underemployed.

(e) *Intensity of underemployment.*—Intensity of underemployment was defined as the ratio of the number of hours a person was unemployed to the total number of hours for which he was available.

## 6.6 Results of the survey :

(a) During the year (June, 1963 to May, 1964, 45.77 per cent of the total rural population was in the labour force. Of the total labour force component, 79.86 per cent were fully employed, 17.78 per cent underemployed and 2.36 per cent unemployed. Thus the problem of unemployment was not very acute but that of underemployment was relatively serious. The number of persons in the labour force varied between 40.82 per cent of the total rural population in May, 1964 to 50.17 per cent in October, 1963.

(b) Generally, the percentage of persons in the labour force to total population was highest in the case of cultivators (ranging between 42.25 per cent in May, 1964 to 52.37 per cent in October, 1963), slightly larger than the aggregate in the case of agricultural labourers and the least (ranging between 32.23 per cent in May, 1964 to 42.85 per cent in December, 1963) in the case of "Others".

(c) About 80 per cent of the total persons in the labour force reported themselves as fully employed. The percentage of fully employed persons varied from category to category; it was highest in the case of agricultural labourers and least in the case of "Others".

(d) The extent of unemployment was not much. However, it varied from month to month. It was 3.09 per cent of the total labour force in April, 5.09 per cent in May, 8.42 per cent in June and 3.24 per cent in July. In all other months it was below 2 per cent.

(e) The extent of underemployment was about 20 per cent of the total rural population though it varied from 11.81 per cent in November, 1963 to 28.19 per cent in June, 1963.

The intensity of underemployment was about 45 per cent though it varied from 33.62 per cent in December, 1963 to 50.18 per cent in June, 1963.

## 7.0 25th round of the NSS :

The 25th Round of the NSS was canvassed primarily to study the economic conditions of the weaker section of the rural population. The survey was spread over 8,136 villages for the State sample. The weaker section of the rural population comprised of two strata, viz.,

- (i) small cultivator households ; and

(ii) non-cultivator wage earner households. Part of the information collected, analysed and published so far is reproduced below:

### 7.1 Employment & unemployment :

The distribution of estimated number of mandays spent per week under different types of economic and other activities by persons belonging to various age groups and sex was as given in Table No. 4.

The Table No. 4 shows that the number of mandays available and/or seeking work were higher, *i.e.*, 2.7 per cent—1.7 per cent for persons aged 10-14 years, 5.2 per cent for 15-44 years and 1.8 per cent for 45-59 years—in the case of non-cultivator wage earner households than the small cultivator households, *i.e.*, 0.9 per cent—0.2 per cent for persons aged 10-14 years, 1.8 per cent for 15-45 years and 1.4 per cent for 45-59 years. Almost a similar trend was observed in the case of males and females in both the strata. Similarly, the number of mandays worked in non-farm occupations either as self-employed or non-self-employed was higher in the case of non-cultivator wage earner households than in the case of small cultivator households. The number of male mandays spent/worked in almost all the occupations except those engaged in domestic work and not available for work due to other reasons were higher than the female mandays spent/worked in similar occupations in both the strata, it was so in respect of each age group also.

### 7.2 Average earnings :

The average rate of earnings per manday by employees of different sex, age group, engaged in agriculture and other occupations separately for small cultivator households and non-cultivator wage earner households were as given in Table No. 5.

Table No. 5 shows that the average daily earnings per manday worked for all non-self-employed were more *i.e.*, Rs. 2.50—Rs. 2.88 for males and Rs. 1.75 for females—in the case of non-cultivator wage earner households than the small cultivator households average earnings of Rs. 2.30—Rs. 2.54 for males and Rs. 1.68 for females. The average earnings per manday for those who worked in other farms for salary or wages were more than those who worked in non-farm occupations as non-self-employed in both the strata. Similarly, the average earnings per male manday worked was more than the female manday worked in respect of each occupation and size-group in both the strata.

TABLE-4

**Percentage distribution of estimated number of man-days spent per week under different types of economic and other activities by persons belonging to various age-sex groups**

*Females*

1. Worked in farm . . .	0·3	12·5	36·9	26·7	6·4	19·8	..	16·6	26·8	29·0	3·7	18·4
2. Worked in non-farm occupation . . .	0·1	6·4	6·6	8·4	..	4·2	..	1·6	13·8	20·5	..	9·8
3. Did not do any gainful work other than (i) & (ii) . . .	98·9	79·6	53·9	63·1	69·8	7·35	100·0	81·8	54·7	42·7	87·6	68·0
(i) seeking and/or available for work . . .	..	0·4	1·0	..	..	0·5	..	..	4·7	1·0	..	2·2
(ii) not available for work due to illness, injury, etc. . . .	0·7	1·1	1·6	1·8	23·8	2·0	..	..	..	6·8	8·7	1·6
<b>TOTAL</b> . . .	<b>100·0</b>											

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*Persons*

1. Worked in farm . . .	0·8	20·5	51·3	47·6	17·1	29·2	0·5	9·5	42·2	25·3	23·1	24·1
2. Worked in non-farm occupation . . .	1·1	8·3	14·3	12·6	9·2	8·9	..	9·3	23·4	22·3	8·4	14·6
3. Did not do any gainful work other than (i) & (ii) . . .	97·4	70·5	30·6	32·6	40·1	58·5	97·7	76·9	28·3	32·2	64·3	44·7
(i) seeking and/or available for work . . .	..	0·2	1·8	1·4	..	0·9	..	1·7	5·2	1·8	..	2·7
(ii) not available for work due to illness, injury, etc. . . .	0·7	0·5	2·0	5·8	24·6	2·5	1·8	2·6	0·9	18·4	4·2	3·9
<b>TOTAL</b> . . .	<b>100·0</b>											

Source : N.S.S.—25th Round - State : Rajasthan.

TABLE-5

*Average rate of earnings per manday by employees of different age-sex groups engaged in agricultural and other occupations*

Age group (in years)	Small Cultivator Households			Non-Cultivating Wage Farm Households		
	Average Earnings per Manday in Rupees					
1. 0--9	.	.	.	..	..	..
2. 10--14	.	.	1.90	1.75	1.64	0.75
3. 15--44	.	.	2.78	2.47	2.67	3.03
4. 45--59	.	.	2.20	2.24	2.22	2.56
5. 60 & above	.	4.20	1.61	2.25	2.91	1.75
<b>TOTAL</b>	~	2.66	2.34	2.54	2.97	2.66
						2.88

*Females*

1. 0-9	..	..	..	..	..	..	..
2. 10-14	..	..	1.14	1.10	1.12	1.36	1.36
3. 15-44	..	..	1.75	1.57	1.71	2.01	2.15
4. 45-59	..	..	1.62	..	1.62	1.76	1.42
5. 60 & above	..	..	4.00	..	4.00	1.00	1.00
<b>TOTAL</b>	..	1.74	1.46	1.68	1.88	1.32	1.75

*Females*

<i>Persons</i>							
1. 0-9	..	..	..	..	..	..	..
2. 10-14	..	..	1.52	1.42	1.49	1.23	2.00
3. 15-44	..	..	2.48	2.32	2.43	2.75	2.61
4. 45-59	..	..	1.83	2.24	1.96	1.98	1.51
5. 60 & above	..	..	4.12	1.61	2.50	2.80	2.75
<b>TOTAL</b>	..	2.36	2.20	2.30	2.59	2.25	2.50

Source : N.S.S. 25th Round : Rajasthan.

## TAMIL NADU

According to the provisional population total, the population of Tamil Nadu was 41.10 millions, area 130.0 thousand square kms. and density 316 persons per square km. During 1961-71 the rate of population growth in rural areas was 16.02 per cent while in urban areas it was 34.44 per cent.

### **Working Population :**

The working population normally comprises of persons gainfully employed or participating in some economically productive work. The data on the working population is generally obtained from the decennial censuses. But due to constant changes in the concepts and definitions of "worker", the figures so obtained are, strictly speaking, not comparable. The worker participation rate indicates the proportion of the working population to the total population. In order to appreciate the volume of working population or for that matter the worker participation rate in proper perspective, it is necessary to have an idea of the concepts and definitions adopted in classifying the population into working and non-working population. In the 1961 Census, and particularly in the case of seasonal work a person who had had some regular work of more than one hour a day throughout the greater part of the season was treated as a worker. In the 1971 Census, however if a person was or had been working in the current year on last working season for the greater part of the season, he was treated as belonging to the working population. Thus the elastic definition of 1961 gave scope to include most of the housewives who rendered some assistance or to other in the work like cultivation and household industry done by other family members for a little time more than an hour a day, as worker. While in the 1971 Census, it was specifically mentioned that a man or a woman who was engaged primarily in household industry such as cooking for own household or performing one's household duties or a boy or a girl who was primarily a student attending institution even if such a person helps in the family economic activity but not as a full-time work, was treated as a non-worker in respect of his main activity. The working population and its share to the total population as observed during 1971 Census was as given in Table No. 1 below :

 TABLE-1

*Distribution of working population to the total population by sex and districts*

	District	Sex	Percentage of Work-
			ing Population to Total Population
	1	2	3
1.	Madras	P	28.96
		M	49.05
		F	6.69
2.	Chingleput	P	35.17
		M	54.44
		F	14.69

1	2	3
3. North Arcot	P M F	36·59 55·68 17·03
4. South Arcot	P M F	35·92 57·27 13·92
5. Dharampur	P M F	37·74 57·74 17·11
6. Salem	P M F	40·26 59·59 20·25
7. Coimbatore	P M F	41·41 60·46 21·48
8. The Nilgiris	P M F	39·12 50·86 26·76
9. Madurai	P M F	37·60 55·62 19·33
10. Tiruchirapalli	P M F	37·80 58·04 17·39
11. Thanjavur	P M F	33·94 55·44 12·32
12. Ramanathapuram	P M F	37·27 54·35 20·90
13. Tirunelveli	P M F	37·53 54·32 21·44
14. Kanyakumari	P M F	28·59 49·80 7·00
15. Tamil Nadu	P M F	36·67 55·96 19·96

## 2.1 Distribution of Working Population :

The distribution of working population among different occupations as observed from 1971 census was as given in Table No. 2.

TABLE-2

*Distribution of working population by Agriculture and other workers separately by sex and area—1971 census*

Census year	Area	No. of Workers (in million)	Percentage Distribution of Cultivators						Workers as Agrl. Labour			Other Workers		
			P	M	F	P	M	F	P	M	F	P	M	F
	Total	15.07	11.62	3.45	30.97	34.50	19.06	29.13	23.92	46.70	39.90	41.58	34.24	416
1971	Rural	11.24	8.40	2.84	39.91	45.77	22.53	36.46	30.80	53.24	23.63	23.43	24.23	
	Urban	3.83	3.22	0.61	4.79	5.13	3.04	7.69	6.02	16.43	87.52	88.85	80.53	

### 3.0 Labour force surveys :

During the year 1959-70 the NSS conducted a survey on various aspects of the socio-economic conditions of the people in both urban and rural areas of the State. The results of the survey based on about 4,000 sampled households covering about 19,500 persons are given below. The results are provisional.

### 3.1 Distribution of population by labour force status :

The data collected in respect of about 19,500 persons in regard to the labour force status have been summarised in Table No. 3 below :

TABLE-3

Percentage distribution of population by sex and labour force status in Tamil Nadu 1960-70

### Percentages

	Rural						Urban						State		
	Male			Female			Male			Female			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
<b>1. Labour Force</b>															
Employed	.	.	.	57.5	32.7	45.4	47.0	10.5	29.1	53.3	23.9	38.9			
Unemployed	.	.	.	2.4	0.1	1.3	3.0	1.5	2.3	2.7	0.7	1.7			
				59.9	32.8	46.7	50.0	12.0	31.4	56.0	24.6	40.6			
													TOTAL		

About 45.4 per cent—57.5 per cent males and 32.7 per cent females—of the rural population and 29.1 per cent—47.0 per cent males and 10.5 per cent females—of the urban population were employed in gainful activities. Similarly 1.3 per cent—2.4 per cent males and 0.1 per cent females—of the rural population and 2.3 per cent—3.0 per cent males and 1.5 per cent females—of the urban population were unemployed. For the State as a whole 38.9 per cent—53.3 per cent males and 23.9 per cent females—were employed, while 1.7 per cent—2.7 per cent males and 0.7 per cent females—were unemployed. Among males 53.3 per cent—57.5 per cent in rural areas and 47.0 per cent in urban areas—were employed and 2.7 per cent—2.4 per cent in the rural areas and 3.0 per cent in urban areas—were unemployed. The corresponding percentage for females were 23.9 per cent—32.7 in rural areas and 10.5 per cent in urban areas—were employed and 0.7 per cent—0.1 per cent in rural areas and 1.5 per cent in urban areas—were unemployed.

### 3.2 Levels of education among unemployed :

The data collected with regard to the educational attainments of the unemployed persons are summarised and given in Table-4 below :

**TABLE-4**  
*Percentage distribution of unemployed persons by educational standard*

	Unemployed			Educational Standard				Total
	M	F	T	Graduate Matric & Above	Literate but Below Matric	Illiter- ate		
Rural .	95.4	4.6	100.0	2.6	15.8	58.6	23.1	100.0
Urban .	67.4	32.6	100.0	8.6	62.3	23.4	5.7	100.0
State .	80.4	19.6	100.0	5.8	40.7	39.8	13.7	100.0

Among the unemployed in rural areas, 95.4% were males and 4.6 per cent females. Of these, 2.6 per cent were graduates, 15.3 per cent matriculates, 58.6 per cent literates but below matric and the remaining 23.0% illiterates.

In urban areas 67.4% of the total unemployed persons were males and 32.6% females. Of these, 8.6% graduates, 62.3% matriculates, 23.4% literates but below matric and the remaining 5.7% illiterates.

For the State as a whole, among unemployed 80.4% were males and 19.6% females. Out of these, 5.8% were graduates; 40.7% matriculates; 39.8% literates but below matric; and 13.7% illiterates. Literates but below matric in the rural areas and under-graduates in urban areas constituted the bulk of the unemployed.

### 3.3 Urban labour force status :

The urban labour force surveys were introduced in the NSS 16 Round. The percentage distribution of urban population by labour force status and sex observed in the different rounds of NSS was as given below :

Round	Sex	Employed		Unemployed		Outside Labour Force
		At work	Not at Work	New Entrants	Others	
17th (Sept., 61—July, 62)	M	43.73	1.24	0.40	0.52	52.28
	F	4.43	0.25	0.05	0.00	93.82
	P	26.17	0.80	0.24	0.29	70.85
18th (Feb., 62—Jan., 64)	M	41.56	1.54	0.12	0.13	54.35
	F	3.51	0.31	..	..	92.30
	P	24.12	0.98	0.00	0.07	71.74
19th (July, 64—June, 65)	M	45.94	1.07	0.18	0.16	52.08
	F	5.68	0.11	0.05	..	93.34
	P	27.31	0.62	0.12	0.09	71.18
20th (July, 65—June, 66)	M	40.37	0.41	0.34	0.34	58.54
	F	6.01	0.08	..	0.16	93.67
	P	24.82	0.26	0.19	0.26	74.43
21st (July, 66—June, 67)	M	46.62	0.45	0.20	0.19	52.5
	F	5.10	0.05	0.02	..	94.73
	P	27.56	0.27	0.12	0.10	71.90

#### 4.0 Requirements of engineering personnel in Tamil Nadu 1966-71 :

In 1966, the Government of Tamil Nadu decided and conducted a survey to assess the requirements of engineering personnel during the 4th plan period. The study was limited to engineers and engineering technicians. Of the various approaches available, the study attempted the demand forecast through establishment reporting coupled with investment—employment ratio method. Some of the important factors taken into consideration in assessing the future requirements were (a) the rate of growth of economy, (b) mobility, and (c) pattern of utilisation.

#### 4.1 Population frame and sample size :

The population frame chosen comprised of Employment Market Information listing covering all non-agricultural economic activities in the State. It comprised of about 24,000 establishments employing five persons or more. This was broken down into three strata according to the size groups—hundred and more employees, 25 to 99 employees and 5 to 24 employees.

All establishments employing 100 or more workers, 20 per cent of establishments employing 25—99 workers and one per cent of establishments employing 5 to 24 workers numbering in all 2,261 were selected for the survey. The selected establishments were then distributed among the industry groups in each size-groups and the sample members were drawn from each industry in proportional to the numbers in the universe. The specific establishments included in the sample were drawn randomly with a systematic start.

#### 4.2 Response :

Of the 2,261 non-agricultural establishments selected and mailed, 2,241 i.e. 99.1 per cent responded.

#### 4.3 Demand estimates :

The future requirements of engineering personnel in the State were based on the following three segments :

- (i) data for the existing establishments,
- (ii) data for licence establishments, but yet to be commissioned, and
- (iii) data for establishments likely to come up during 1966-71.

#### 4.4 Supply Estimates :

The supply of engineering technicians and engineers for five years ending 1971 were obtained by the following procedure :

- (i) Computing the rate of wastage at different levels of engineering, education and training by output-input matrices ;
- (ii) Estimates of output were obtained by applying the rate of wastage to the corresponding intakes ;
- (iii) To the value obtained in (ii) above was added to the number of engineers and the engineering technicians registered with employment exchanges as unemployed.

#### 4.5 Assumptions :

In making the forecast the following assumptions were made :

- (i) economic planning will continue to be the feature of development ;
- (ii) economic activity will be sustained and the level of investment steadily increased and the economy diversified. Finance, trade and service industries will expand to meet the demand induced by population and industrial growth ; and
- (iii) the tight foreign exchange situation will continue for sometime and therefore, there will be greater efforts in import substitution and increasing utilisation of indigenous material.

#### 4.6 Findings of the survey :

The main findings of the survey were :

- (i) During 1970-71, the demand would be about 9,700 engineers and 10,300 engineering technicians; the existing source of supply will be able to meet 5,500 engineers and 17,400 engineering technicians. The State by the end of 1970-71 will experience a shortage of 4,100 engineers but a surplus of about 7,100 engineering technicians.
- (ii) The shortage of engineers will be spread over all the specialisation though the range of incidence among specialisation will vary from two per cent for metallurgical to 40 per cent in electrical engineers.
- (iii) The demand for engineers and engineering technicians in manufacturing will be 45 per cent and 34 per cent respectively. Corresponding percentages in services will be 17 per cent and 25 per cent; construction 16 per cent and 15 per cent; power and public utility 13 per cent and

12 per cent respectively. The rate of growth for engineers will be highest in manufacturing (60 per cent), followed by power and public utility (51 per cent). The growth rate will vary within a range from 21 per cent in trade and commerce to 60 per cent in manufacturing. The average rate in all the industries will be 50 per cent. The growth rate for engineering technicians will be less, averaging at 31 per cent, a little more than a half for engineers. It varied from 32 per cent in manufacturing to 51 per cent in power and public utility.

### 5.0 25th round of NSS :

The 25th Round of NSS was canvassed primarily to study the economic conditions of the weaker section of the rural population. As is the practice, all the states except those of West Bengal, Nagaland and Himachal Pradesh participated in the work of NSS on a full matching basis. The design was self-weighting at the State level. It was mainly a stratified two-stage one.

The first stage units were villages which were selected circular systematically with equal probability in the form of two independent inter-penetrating within sub-samples and the second stage units were households within the selected villages, in all 8,784 villages for the State sample.

In each selected villages all the households were divided into three sub-strata, *viz.*:

- (i) households having no cultivated land,
- (ii) the lowest 10 per cent of the households having cultivated land, and
- (iii) remaining households.

The households deriving more or less regular and major income in the last year from self-employment in training establishments, manufacturing, mechanised transport, professions or rent or salaried employment were excluded from both sub-strata (i) and (ii) but were included in the sub-strata (iii). On an average from each sub-strata about two sample households were selected. The weaker section of the rural population comprised of two groups (1) small cultivator households of sub-strata (ii) and (2) non-cultivating wage earner households of sub-strata (i). Separate schedules *viz.*, schedule Nos. 16.1 and 16.2 in respect of small cultivator households and non-cultivator wage earner households respectively were canvassed.

Among the various and common items of information collected, analysed and published on a priority basis pertained to the following:

- (i) Time disposition during the reference week of all the members of the household along with their demographic particulars as well as the earnings of the wage earners during the same period,
- (ii) Possibility of supplementing the income of household from ancillary agricultural and non-agricultural activities, and
- (iii) Willingness of the members of the household to move outside the village in the event of regular full-time wage employment being offered to them particularly in public works.

The results presented below pertain to the state sample for all the sub-samples combined. The results are provisional and subject to revision.

### 5.1 Employment & unemployment:

The percentage distribution of estimated number of mandays spent per week in different types of economic and other activities by persons belonging to various age and sex groups were as given in Table No. 4 (attached).

The Table No. 4 shows that the proportion of mandays available and/or seeking work was 3.6—0.2 persons aged upto 9 years, 2.3 for 10-14 years, 5.6 for 15-44 years, 4.4 for 45-59 years and 3.7 for 60 and above years in the case of small cultivator households. The corresponding proportion for the non-cultivator wage earner households were 4.8—0.1, 2.8, 7.8, 7.0 and 1.6 respectively. Though the proportion of mandays available and/or seeking work in the case of females were almost the same in both the strata *i.e.* small cultivator households and non-cultivator wage earner households it varied widely in the case of males. The proportion of male mandays available and/or seeking work was 5.0—3.8 for persons aged 10-14 years, 8.0 for 15-44 years, 6.5 for 45-59 years and 6.0 for 60 and above years in the case of small cultivator households. The corresponding proportion in the case of non-cultivator wage earner households were 7.0—3.7, 12.2, 9.1 and 3.2 respectively. The proportion of mandays available and/or seeking work was higher in the case of males than females in both the strata. This pattern was observed in respect of each age groups. The proportion of mandays worked in non-farm occupations as non-self-employed was more (6.7) in the case of non-cultivator wage earner households than the small cultivators households (2.5). Conversely, the proportion of mandays worked in non-farm occupations as self-employed was more (2.3) in the case of small cultivator households than the non-cultivator wage earner households (1.2). Further, the proportion of mandays worked in other farms for salary and wages was higher (24.2) in the case of non-cultivator wage earner households than the small cultivator households (22.1).

### 5.2 Earnings :

The average rate of earnings per manday by employees of different sex, age groups engaged in agriculture and other occupations separately for small cultivator households and non-cultivator wage earner households were as given in Table No. 5 (attached).

The table shows that the average rate of earnings of all non-self-employed in agricultural and non-agricultural occupations were more *i.e.* Rs. 2.34—Rs. 2.69 for males and Rs. 1.55 for females in the case of non-cultivator wage earner households than the small cultivator households *i.e.* Rs. 1.90—Rs. 2.20 for males and Rs. 1.40 for females. The average rate of earnings per manday for those who worked in other farms for salary and/or wages was less than for those who worked in non-farm occupations as non-self-employed in both the strata. The average earnings per manday work of females were invariably less than their counterparts (males) in respect of each age groups as well as activity in both the strata.

TABLE-4

*Percentage distribution of estimated number of mandays spent per week under different types of economic and other activities by persons belonging to various age-sex groups*

	1	2	3	4	5	6	7	8	9	10	11	12
	<i>Females</i>											
1. Worked in farm . . .	0.6	6.4	41.5	37.1	17.3	25.4	0.6	3.7	35.2	22.2	11.2	20.2
2. Worked in non-farm occupation . . .	0.5	2.7	2.5	2.5	0.6	1.9	..	0.6	3.5	4.9	6.1	2.6
3. Did not do any work other than (i) and (ii)	94.1	90.9	49.6	53.4	46.6	66.0	96.3	91.5	55.3	56.9	51.1	70.0
(i) Seeking and/or available for work	0.3	0.7	3.4	1.5	1.0	2.0	0.3	1.2	2.9	4.6	..	2.0
(ii) Not available for work due to illness, injury, etc. . .	4.5	0.3	3.0	5.5	34.4	4.7	2.8	3.0	3.1	11.4	31.6	5.2
<b>TOTAL</b> . . .	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
	<i>Persons</i>											
	<i>Persons</i>											
1. Worked in farm . . .	0.8	9.2	51.6	57.8	31.9	33.0	0.4	4.8	42.9	35.9	20.4	25.0
2. Worked in non-farm occupation . . .	0.3	2.4	7.9	5.5	6.4	4.8	..	2.7	13.1	12.2	6.5	7.9
3. Did not do any work other than (i) and (ii)	92.9	83.6	30.9	26.6	31.2	53.0	96.0	85.9	30.9	33.4	39.5	55.9
(i) Seeking and/or available for work	0.2	2.3	5.6	4.4	3.7	3.6	0.1	2.8	7.8	7.0	1.6	4.8
(ii) Not available for work due to illness, injury, etc. . .	5.8	2.5	4.0	5.7	26.8	5.6	3.8	3.8	5.3	11.8	32.0	6.4
<b>TOTAL</b> . . .	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Source : N.S.S.—25th Round—Tamil Nadu.

TABLE-5

*Average rate of earnings per manday by employees of different sex age groups engaged in agricultural and other occupations*

Age Group in Years	Small Cultivator Households			Non-Cultivating Wage Earner Households		
	Average Earning per Manday in Rupees			Average Earnings per Monday in Rupees		
For those who Worked in other Farms for Salary or Wages	For those who Worked in Non- Farm Oc- cupations	For all Non-Self- Employed	For those who Worked in other Farm for Salary or Wages	For those who Worked in Non- Farm Oc- cupations as Non- Self- Employed	For all Non-self- Employed	
Males						
1. 0—9	.	1.07	..	1.07	1.00	..
2. 10—14	.	0.82	1.66	1.00	1.33	0.80
3. 15—44	.	2.07	3.05	2.22	2.42	3.69
4. 45—59	.	2.29	2.90	2.35	2.35	3.53
5. 60 & above	.	1.97	3.06	2.35	2.39	3.64
TOTAL	.	2.07	2.97	2.20	2.38	3.52
Females						
1. 0—9	.	..	..	0.50	..	0.50
2. 10—14	.	1.00	0.83	0.95	0.97	2.00
3. 15—44	.	1.43	1.97	1.44	1.52	1.45
4. 45—59	.	1.32	1.04	1.31	1.52	3.07
5. 60 & above	.	1.59	..	1.59	1.16	2.71
TOTAL	.	1.40	1.35	1.40	1.50	2.02
Persons						
1. 0—9	.	1.07	..	1.07	0.85	..
2. 10—14	.	0.89	1.22	0.98	1.24	0.85
3. 15—44	.	1.79	2.97	1.90	2.08	3.46
4. 45—59	.	2.00	2.59	2.05	2.10	3.44
5. 60 & above	.	1.83	3.06	2.14	2.05	3.21
TOTAL	.	1.80	2.77	2.90	2.06	3.33

*Source : N.S.S.—5th Round—Tamil Nadu.*

### UTTAR PRADESH

Uttar Pradesh occupies the first place in respect of population and fourth place with regard to area among the States of the country. According to 1971 Census, the population of this State was 8,83,64,779 with 53.1 per cent males and 46.9 per cent females. Eighty-six per cent of the population resided in rural areas and only 14 per cent in the urban areas. The density of population was 300 per square kilometre as against the average density of 182 square kilometres in the country.

#### I. Labour force

##### 1. Participation rates :

###### (a) *Census data :*

On the basis of the available provisional tables of 1971 Census, the total number of workers, non-workers having subsidiary gainful activity and the number of persons in the residuary category of non-workers—"others" (which includes the persons not having any gainful activity or specific non-gainful activity but who were reported to be seeking employment) have been added up to have an estimated of the labour force. The figures thus arrived at are given in Table No. 1.

**TABLE-1**  
*Data on labour force as per 1971 census*

Region/Sex	Number of Persons Classified as				Percentage of Persons with Gainful Work and Seeking Work to Total Popula- tion
	Workers	Non-Work- ers having Subsidiary Activity	'Others' Among Non- Workers	Total (Cols. 2+3+4)	
	2	3	4	5	6
State					
Male . .	2,47,77,359	1,900	2,90,100	2,50,69,359	53.43
Female . .	36,39,512	15,900	62,600	37,18,012	8.97
Persons . .	2,84,16,871	17,800	3,52,700	2,87,87,371	32.58
Rural					
Male . .	2,14,90,022	1,200	1,95,300	2,16,86,522	54.04
Female . .	34,12,690	10,700	53,200	34,76,590	9.69
Persons . .	2,49,02,712	11,900	2,48,500	2,51,63,112	33.11
Urban					
Male . .	32,87,337	700	94,800	33,82,837	49.81
Female . .	2,26,822	5,200	9,400	2,41,422	4.33
Persons . .	35,14,159	5,900	1,04,200	36,24,259	29.30

*Source : 1971 Census : (1) Provisional Population Tables.*

*(2) B-Series Data obtained from the Registrar General.*

In Table No. 2, the data on labour force as per 1961 Census are given. However, due to difference in concepts and reference period as well as the approach about unemployed persons adopted in the two Censuses the data are not comparable.

TABLE-2  
*Percentage of population in labour force as per 1961 census*

Region	Percentage of Population in Labour force		
	Male	Female	Persons
State . . .	58.41	18.15	39.24
Rural . . .	59.31	19.91	40.33
Urban . . .	52.65	5.36	31.46

(b) NSS estimates :

For the intervening period data on labour force are available from the NSS rounds and present in Table No. 3.

TABLE-3  
*Labour force as per national sample survey*

NSS Rounds	As per State Samples or Pooled Results of Central and State Samples			As per Central Samples		
	Males	Females	Persons	Males	Females	Persons
<i>Rural :</i>						
23rd Round 1968-69 . .	51.37	18.28	35.80	Not available		
19th Round 1964-65 . .	53.00	10.80	32.60	53.74	23.02	39.3
<i>Urban :</i>						
16th Round 1960-61 . .	15.91	7.37	31.06	Not available		
17th Round 1961-62 . .	49.80	3.62	28.26	50.72	7.20	30.62
18th Round 1963-64 . .	47.51	3.51	27.23	49.96	9.68	29.92
19th Round 1964-65 . .	47.20	3.30	26.80	49.92	7.31	30.61
20th Round 1965-66 . .	46.84	3.79	26.90	49.54	7.19	30.14
21st Round 1966-67 . .	Not available			49.12	7.04	30.01

Source : (1) 23rd Round (Rural) data obtained from the Director, Economics and Statistics, Uttar Pradesh.

(2) Bullets No. 100, 112, 84, 114 and 123 published by the Directorate of Economics and Statistics, Uttar Pradesh,

(3) NSS Reports No. 127, 152, 163, 166 and 181.

The NSS has based the data on current activity status obtaining during the reference period of seven days preceding the date of survey while the census data took into the usual activity status and had a much longer reference period—one year or on working season in case of seasonal and casual works. These are important factors which make comparison of data thrown by NSS and censuses irrelevant. However, the NSS data reveal a declining trend in participation rates both in the urban and rural areas.

(c) *Other estimates :*

(i) In an article "Labour Force Projections for Uttar Pradesh" published in Artha Vijnana of March, 1969, A. N. Mehra has projected the participation rates mentioned in Table No. 4 for the year 1971.

TABLE-4  
*Projected participation rate—1971*

Sex	Rural	Urban
Male . . . . .	56.83	50.99
Female . . . . .	18.99	5.09
Total . . . . .	38.59	30.30

(ii) On the basis of 1961 Census data, the Planning Department, Government of Uttar Pradesh has made projections in respect of labour force as given in the Table No. 5.

TABLE-5  
*Projected labour force for 1961, 1966 and 1971*

Year	Persons in Labour Force (in million)
1961 . . . . .	28.93
1966 . . . . .	31.83
1971 . . . . .	35.73

*Source:* A Study of Unemployment amongst Educated Persons Uttar Pradesh Published by the Planning Department, Uttar Pradesh Government.

2. Some characteristics of the labour force :

(i) *Urban :*

(i) *Distribution by age-group and age-specific participation rates :*

The latest data available are those from the report on the 20th Round of NSS (1965-66) published by the Directorate of Economics and Statistics *vide* their Bulletin No. 123. They are given in the Table No. 6.

TABLE-6

*Percentage distribution of persons in Labour force by age group and participation Rates by age group*

Age Group	Age-wise Distribution		Age Specific Participation Rates	
	Male	Female	Male	Female
0-14	4.23	1.92	1.43	0.17
15-19	6.82	4.79	32.14	1.93
20-24	10.94	8.63	70.97	4.23
25-39	43.31	42.81	97.42	7.13
40-59	33.00	36.42	95.73	8.81
60 & above	4.65	5.43	46.76	3.78
All ages	100.00	100.00	46.84	3.79

The sex-composition of the labour force, as per 20th Round of NSS was 93.47% male and 6.53 per cent female. The distribution pattern by age groups was similar in both the sexes, but in respect of participation rate, it was very low in case of women presumably because of social restrictions prevailing in the State.

In the aforesaid article 'Labour Force Projections for Uttar Pradesh' A. N. Mehra has projected the participation rate given in Table No. 7 for the year 1971.

TABLE-7

*Projected distribution of labour force in 1971 by age group and age-specific participation rates*

Age Group	Distribution by Age Group		Participation Rate by Age Group	
	Male	Female	Male	Female
0-14	1.74	3.56	21.72	7.51
15-19	9.40	10.78	43.29	5.02
20-34	43.94	31.79	31.25	7.62
35-59	39.10	45.34	25.31	12.52
60 & above	5.82	8.40	11.70	9.45
All ages	100.00	100.00	50.99	5.09

Source : "Labour Force Projections for Uttar Pradesh" by A.N. Mehra, published in Artha Vijnana of March, 1969.

## (ii) Distribution by educational standard :

According to the 20th Round of NSS, the distribution of labour force (urban) by educational standard was as per data given in Table No. 8.

TABLE-8

*Percentage distribution of urban labour force by educational Standard*

Educational Standard	Male	Female	Persons
1. Illiterate . . . . .	32.69	74.12	35.40
2. Literates below primary . . . .	21.71	6.39	20.71
3. Primary but below secondary . . . .	25.45	3.83	24.04
4. Secondary but below degree standard . . . .	14.63	9.91	14.32
5. Degree and above . . . .	5.52	5.75	5.63
TOTAL . . . .	100.00	100.00	100.00

*Source :* Bulletin No. 123—20th Round of NSS—Published by the Directorate of Economics and Statistics, U.P. Govt.

67.31% of the male participants were literate, but only 20.15% of them had passed secondary or a higher examination. Among female labour force illiterates accounted for 74.12 per cent of labourers.

## (iii) Employment status and sectors of employment :

Out of 26.90% population constituting the urban labour force as per 20th Round of NSS, 26.76% were persons having some gainful vocation. The distribution of the employed population is mentioned in Table-9.

TABLE-9

*Employment status of persons with gainful work (20th Round)*

Employment Status	Percentage of Persons in Labour Force
1. Employers . . . . .	2
2. Self-Employed . . . . .	36
3. Unpaid family workers . . . . .	11
4. Employees . . . . .	51

The percentage distribution of the employed persons by industry groups is given in the Table No. 10. The figures for the 20th Round in respect of trade and commerce and services are not consistent with the findings of the previous rounds on the All India pattern.

TABLE-10

*Percentage distribution of working population by sectors of employment  
as per NSS rounds (State Samples)*

Industry Group	20th Round (1965-66)	19th Round (1964-65)	17th Round (1961-62)	16th Round (1960-61)
1. Agriculture, live stock rearing, forestry, hunting and fishery .	11.86	9.6	14.39	14.10
2. Mining and quarrying . .	..	0.2	..	0.06
3. Manufacturing . . .	21.79	25.9	22.97	30.72
4. Constructions . . . .	2.24	3.1	4.10	3.15
5. Electric, gas and water supply and sanitary service . .	0.32	0.5	0.94	0.95
6. Trade and commerce . .	9.62	22.9	20.37	16.35
7. Transport and communication .	0.32	9.8	7.65	8.64
8. Services . . . .	53.53	25.7	23.36	23.07
9. Miscellaneous trade . .	0.32	2.3	6.22	2.96
TOTAL . . . .	100.00	100.00	100.00	100.00

### B. Rural labour force :

#### (i) Distribution by age-group and age-specific participation rates :

The latest available data on the characteristics of the rural labour force are those emanating from the 23rd Round of NSS of which the results based on State Samples have been available to the Committee by the courtesy of the Director, Economics and Statistics, Uttar Pradesh Government.

The rural population according to that survey was 6.74 crores. Thirty-six per cent of the population was in labour force. Sex-wise composition of the labour force was 75.99 per cent men and 24.01 women.

The distribution of men and women in labour force by age group and age-group-wise percentage of the participants in the population in the corresponding age group are given in the Table-11.

TABLE-11

*Percentage distribution of persons in labour force by age group and sex and participation rate as per 23rd round of NSS*

Age Group	Distribution by			Age Group		Participation Rates by Age Group	
	Male	Female	Persons	Male	Female	Male	Female
0—9 . .	0.27	0.63	0.36	0.46	0.41	0.46	0.44
10—14 . .	2.99	3.16	3.03	10.95	5.12	8.52	8.52
15—59 . .	87.62	90.53	88.32	90.58	31.55	62.02	62.02
60 and above . .	9.12	5.68	8.29	72.11	12.68	40.69	40.69
TOTAL . .	100.00	100.00	100.00	51.37	18.28	35.80	35.80

The age specific participation rate projected for 1971 by A. N. Mehra in the article "Labour Force Projections for Uttar Pradesh" is given in Table -12.

TABLE-12  
*Projected sex and Age-specific Participation Rates for 1971*

Age group	Percentage of Age-wise Population in the Labour Force		
	Male	Female	Persons
0—14 . . . . .	5.65	3.43	4.71
15—34 . . . . .	90.16	28.53	60.41
35—59 . . . . .	98.36	34.71	67.89
60 and above . . . . .	83.64	20.91	53.31
All ages . . . . .	56.83	18.99	38.58

(ii) The male and female force contained persons with activity status as given in Table-13 :

TABLE-13  
*Percentage distribution of labour force by activity (23rd Round National Sample Survey)*

	Employed	Unemployed	Total
Male labour force . . .	99.93	0.07	100.00
Female labour force . . .	0.21	99.79	100.00
Total labour force . . .	0.10	99.90	100.00

(iii) Distribution of labour force by industry group :

The percentage distribution of working population according to their engagement in principal industries according to the 23rd Round is given in Table-14.

TABLE-14  
*Percentage distribution of working males and females by industry group*

S.No.	Industry	Male	Female	Total
1.	Agriculture and animal husbandry . . .	83.68	86.71	84.41
2.	Manufacturing . . . . .	6.46	6.12	6.38
3.	Construction . . . . .	0.87	1.26	0.96
4.	Trade and commerce . . . . .	1.73	1.90	1.77
5.	Transport and communication . . . .	0.93	..	0.71
6.	Services . . . . .	2.73	0.42	0.46
7.	Others forestry, log falling, hunting, fishing, mining and quarrying, electric supply and gas workers, sanitary and their services . . . . .	3.60	3.59	3.59
	TOTAL . . . . .	100.00	100.00	100.00

According to 1961 Census also 82.98 per cent of working population was engaged in agriculture and animal husbandry. In the 19th Round of NSS (1964-65) 84.14 per cent of the working persons were having agriculture as their principal industry and in 1971 Census also the percentage of persons classified as cultivators and agricultural labour among "Workers" was 84.58. Thus by and large, the rural economy is predominantly agricultural.

The percentage of agricultural labourer among the above mentioned workers engaged in agriculture is given in Table-15 according to 23rd Round NSS, 1961 and 1971 Censuses.

TABLE-15

*Percentage of agricultural labourers among persons employed in Agriculture*

Survey Particulars		Male	Female	Persons
23rd Round of Survey (1968-69)	.	14.51	18.36	15.43
1961 Census	.	10.24	19.88	12.45
1971 Census	.	18.89	37.73	21.47

The tremendous increase in the percentage of agricultural labourers in 1971 Census is noteworthy.

## II. Underemployment :

Data on underemployment in the State are available from NSS reports only. In the NSS surveys underemployment has been measured in terms of the number of days or hours of forced employment or under-work from which the worker was affected during the reference period. The report of the Directorate of Economics and Statistics for the 19th Round of Survey (1964-65) has made the following revelations in respect of rural areas of Uttar Pradesh :

- (i) About 92 per cent of the working population worked on all the 7 days during the reference period of a week. Even among the females 39 per cent worked on all days.
- (ii) More than half (56%) of the working population was reported to have worked for more than 56 hours during the reference week. The percentage of those who worked for less than 28 hours during the reference period of a week was only 4.42 among males and 14.46 among females and 6.01 (among total working population).
- (iii) 91 per cent of the working population was not available for any extra work. This working population had 92% of the male workers and 88% of the female workers. Only nine per cent of the workers were available for extra work. Out of them five per cent were available for 7 hours or less during the reference week and two per cent were available for 8 to 35 hours and remaining for 36 hours or more.

- (iv) The distribution of working population by extra hours available in a week and expenditure class as per 19th Round of NSS is given in Table-16.

TABLE-16

*Percentage distribution of workers by extra hours available for work and expenditure class (19th round of NSS)*

Extra Hours Available for Work	Monthly per Capita Expenditure Class (Rupees)					Total
	Rs. 5—10	Rs. 10—30	Rs. 30—50	Above Rs. 50		
0 hours . . . .	82.86	90.63	93.03	95.24	91.22	
1—21 . . . .	2.86	6.63	6.12	4.76	6.44	
22—56 . . . .	14.28	2.74	0.85	..	2.44	

In the 23rd Round of NSS (1968-69) also data was collected on underemployment. It was found that about 90 per cent of the working population worked for all the seven days of the week. A similar situation was found in case of males and females. Only about nine per cent of workers worked for 3 to 6 days per week and the rest one per cent only worked for two days or less per week. In Table-17, the percentage of workers according to the hours worked and hours available for extra work during the reference week are given.

TABLE-17

*Percentage distribution of working population by hours of work and extra hours for work*

Number of Hours Worked	Extra Hours Available for Work									Total
	0 Hrs.	0—7 Hrs.	7—14 Hrs.	14—21 Hrs.	21—28 Hrs.	28—35 Hrs.	35—42 Hrs.	42 Hrs. or More		
	..	..	..	..	..	..	..	..	..	
0—7 . . . .	100.00	..	..	..	..	..	..	..	..	
7—14 . . . .	100.00	..	..	..	..	..	..	..	..	100.00
14—21 . . . .	89.65	..	3.45	..	..	..	6.90	..	..	100.00
21—28 . . . .	92.68	3.66	..	..	..	2.44	1.22	..	..	100.00
28—35 . . . .	100.00	..	..	..	..	..	..	..	..	100.00
35—42 . . . .	99.05	..	..	..	..	0.95	..	..	..	100.00
42—49 . . . .	98.48	..	1.52	..	..	..	..	..	..	100.00
49—56 . . . .	100.00	..	..	..	..	..	..	..	..	100.00
56 or more . . . .	99.62	0.38	..	..	..	..	..	..	..	100.00
Hours not specified . . . .	100.00	..	..	..	..	..	..	..	..	100.00
TOTAL . . . .	99.24	0.56	0.10	..	..	0.15	0.15	..	..	100.00

The above table suggests that the extent of underemployment is quite low.

But the position should be viewed in the context of the questionnaire used. Because of the non-availability of employment opportunities locally most of the under-worked persons would have replied in negative to the question about availability for extra work. If this information had been supplemented by the question about reason for non-availability and tabulated according to age groups it would have thrown light on the problem of underemployment.

### III. Unemployment :

#### 1. Extent and incidence of unemployment :

##### (a) Census data :

(i) *1971 Census*.—In 1971 Census, according to instructions to enumerators, persons not having any gainful work as their major and non-workers not having any specific non-working category and also not having any subsidiary activity and who were reported to be seeking work were categorised as "Others". In the Table-18 the number of such non-workers "Others" and their proportion in the population and labour force has been given.

TABLE-18

*The number and percentage of non-workers "others" among the population and labour force in Uttar Pradesh—1971 census*

Particular	State	Rural	Urban
<b>1. Number of "others" among non-workers :</b>			
Male . . . . .	2,90,100	1,95,300	94,800
Female . . . . .	62,600	53,200	9,400
Persons . . . . .	3,52,700	2,48,500	1,04,200
<b>2. Percentage of "others" :</b>			
(i) to population . . . . .	0.40	0.33	0.84
(ii) to total labour force . . . . .	1.23	0.99	2.88
(iii) of males in the 'non-workers' "others"	82.25	78.59	90.98
(iv) of female in the 'non-workers' "others"	17.75	21.41	9.02
(v) to male population . . . . .	0.62	0.49	1.42
(vi) to male labour force . . . . .	1.16	0.90	2.80
(vii) to female population . . . . .	0.15	0.15	0.17
(viii) to female labour force . . . . .	1.68	1.53	3.89

(ii) *1961 census*.— In 1961 census specific questions were put to ascertain the extent of unemployment. In the Table-19 the extent and incidence of unemployment according to that census are given :

TABLE-19

*Extent and incidence of unemployment as for 1961 census*

Particulars		State	Rural	Urban
<b>Percentage of unemployed persons :</b>				
(i) to population	. . . . .	0.12	0.06	0.51
(ii) to labour force	. . . . .	0.30	0.14	1.62
(iii) of males	. . . . .	95.59	93.68	97.99
(iv) of females	. . . . .	4.41	6.32	2.01
(v) to male population	. . . . .	0.22	0.11	0.91
(vi) to male labour force	. . . . .	0.37	0.18	1.72
(vii) to female population	. . . . .	0.01	0.01	0.02
(viii) to female labour force	. . . . .	0.06	0.04	0.43

*(b) The NSS data :*

Data on unemployment according to the NSS Rounds are given in Table-20.

TABLE-20

*NSS data on the extent and incidence of unemployment by sex and region*

Particulars of the Area NSS Rounds	To the Population			To the Labour Force		
	Male	Female	Persons	Male	Female	Person
<b>Rural State Samples :</b>						
23rd Round (1968-69)	0.04	0.04	0.04	0.08	0.22	0.11
19th Round (1964-65)	0.20	0.00	0.20	0.38	0.00	0.61
<b>Central Samples :</b>						
19th Round (1964-65)	0.39	1.28	1.14	0.73	0.56	2.89
<b>Urban State Samples :</b>						
20th Round (1965-66)	0.24	0.01	0.14	0.51	0.26	0.52
19th Round (1964-65)	0.40	0.00	0.20	0.85	0.00	0.75
18th Round (1963-64)	0.34	0.00	0.20	0.71	0.00	0.73
16th Round (1960-61)	0.93	0.06	0.45	1.80	0.81	1.45
<b>Central Samples :</b>						
21st Round (1966-67)	0.33	0.04	0.20	0.67	0.57	0.66
20th Round (1965-66)	0.61	0.07	0.36	1.33	0.97	1.19
19th Round (1964-65)	0.71	0.15	0.45	1.44	2.05	1.47
18th Round (1963-64)	0.57	0.04	0.32	1.14	0.60	1.07
17th Round (1961-62)	1.15	0.10	0.67	2.27	1.39	2.19

### Other Estimates :

Planning Department of the U.P. Government had estimated the number of unemployed persons as 21.20 lakhs at the end of the Third Plan (1966) and 23.04 lakhs at the commencement of the 4th plan in 1969. The calculations made are shown in the Table No. 21.

The Planning (C) Department of U.P. Government has given the estimates in respect of unemployment in U.P. as given in Table-21.

TABLE-21

*Estimates on unemployment given by the Planning Department of  
U.P. Government*

(figures in lakhs)

	Second Plan (1956-61)	Third Plan (1961-66)	Fourth Plan (1969-74)
1. Backlog of unemployment at the beginning of the Plan period . . . . .	9.64	13.00	23.04
2. New entrants in labour force . . . . .	16.59	27.20	37.00
3. Total job requirements of the plan period . . . . .	26.05	40.20	60.00
4. Target of employment during the plan period . . . . .	not fixed	21.50	not available
5. Anticipated achievement . . . . .	13.05	19.00	..
6. Carry over of unemployment at the end of the Plan period . . . . .	13.00	21.20	..

*Source : A Study of unemployment amongst educated persons in Uttar Pradesh (pp. 7).*

### IV. Characteristics of the unemployed persons

#### (i) Age-wise distribution :

The "Others" among non-workers are distributed in different age groups as per percentages given in the Table No. 22.

TABLE-22

*Percentage distribution of non-workers "others" by age groups  
1971 census*

Age Group	Total		Rural		Urban	
	M	F	M	F	M	F
0—14 . .	25.41	37.23	30.82	39.10	14.24	20.60
15—19 . .	20.72	10.54	19.71	8.46	22.78	22.34
20—24 . .	18.30	7.03	16.23	5.08	22.57	18.09
25—29 . .	8.76	3.67	8.19	3.00	9.92	7.45
30—39 . .	9.03	5.43	7.99	5.83	11.18	3.19
40—49 . .	5.20	4.47	4.51	4.89	6.65	2.13
50—59 . .	4.24	7.51	3.84	7.33	5.09	8.50
60 and above	8.03	23.16	8.35	25.88	7.38	10.64
Age not specified	0.31	0.96	0.36	0.93	0.22	1.06
<b>TOTAL . .</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>
Base No. of Persons	2,90,100	62,600	1,95,300	53,200	94,800	9,400

*Source : B series data obtained from the Registrar General.*

It is remarkable that almost one-fourth of men and more than one third of women in the category "Non-workers" "Others" was under fifteen years of age. The percentage was higher than this proportion in the rural areas and indicates the poverty prevailing in the rural areas. It is also notable that 63 per cent men and 54 per cent of women were in the age group 0-24 and were obviously, new entrants. The fact is borne out by the results of the NSS surveys pertaining to urban labour force according to which, in 20th Round (1965-66) 100 per cent of women job seekers and 53 per cent of unemployed men were new entrants. According to the 19th Round (1964-65) the corresponding percentages were 82 among male and 50 among female unemployed belonged to the age group 15-24.

#### (ii) Distribution by educational standard :

The data on distribution of the persons who are in the category under reference are available in respect of those who were aged 15 or more during the census. In rural areas the percentage of the other non-workers in this age group was 69 for men and 11 for women in rural areas and 85 for men and 72 for women in the urban Uttar Pradesh. The percentage distribution by educational standard and age-group as given in the Table No. 23.

TABLE-23

*Percentage distribution of non-workers—"others" aged 15 and above by age-groups and educational standard  
(1971 census)*

Educational Standard	Total Persons above 15 years	Percentage Distribution by Age Group										
		15—19	20—24	25—29	30 and Above	Ages not Specified	Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11	12	13
<i>A Rural</i>												
1. Illiterate . . .	45·8	91·7	35·3	73·3	21·8	81·5	36·9	87·5	72·4	96·5	85·7	100·0
2. Literate below Primary . . .	10·0	3·1	11·2	6·7	8·8	3·7	5·0	..	11·4	2·6	14·3	..
3. Primary . . .	10·6	1·9	18·7	6·7	8·5	7·4	13·7	6·3	4·6	..	..	..
4. Middle . . .	15·2	1·9	21·8	11·1	20·8	..	14·4	..	6·6	0·4	..	..
5. Matriculation or Higher . . .	15·5	1·5	13·0	2·2	32·5	7·4	24·4	6·2	3·7	0·4	..	..
6. Non Technical Diploma or Certificate not equal to Degree . . .	0·6	..	..	..	1·0	..	1·9	..	0·4	..	..	..
7. Technical Diploma or Certificate not equal to Degree . . .	..	..	..	..	..	..	..	..	..	..	..	..
8. Graduation and above . . .	2·3	..	..	..	0·6	..	3·7	..	0·8	..	..	..
<b>TOTAL . . .</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0*</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>
Number of Persons . . .	1,351	324	385	45	317	27	160	16	482	231	7	5

\*The Percentages in the column do not total up to 100.0 due to rounding off.

	1	2	3	4	5	6	7	8	9	10	11	12	13
<i>Urban</i>													
1. Illiterate . . . . .	36·9	42·6	41·2	28·6	21·5	17·6	25·5	57·1	48·8	68·2	50·0	100·0	
2. Literate . . . . .	10·0	5·9	10·6	4·8	7·5	..	6·4	14·3	12·5	9·1	..	100·0	
3. Primary . . . . .	12·3	5·9	20·4	9·5	10·3	..	11·7	..	8·0	9·1	..	..	
4. Middle . . . . .	15·7	7·3	14·3	14·3	21·0	11·8	17·0	..	12·5	13·6	..	..	
5. Matriculation or Higher Secondary . . . . .	19·3	26·5	13·0	38·1	29·0	35·3	23·4	14·3	15·3	..	50·0	..	
6. Non-Technical Diploma or Certificate not equal to Degree . . . . .	0·1	..	..	..	0·5	..	..	..	..	..	..	..	
7. Technical Diploma or Certificate not equal to Degree. . . . .	0·5	..	..	..	0·5	..	2·1	..	..	..	..	..	
8. Graduate Degree other than Technical Degree. . . . .	3·2	5·9	..	..	6·5	23·5	8·5	..	1·4	..	..	..	
9. Post-graduate Degree other than Technical Degree . . . . .	1·6	5·9	..	4·7	3·3	1·8	3·2	14·3	1·1	..	..	..	
10. Technical Degree or Diploma equal to Degree or Post-graduate Degree. . . . .	0·4	..	..	..	..	..	2·1	..	0·4	..	..	..	
<b>TOTAL . . . . .</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0*</b>	<b>100·0</b>						
<b>Number of Persons . . . . .</b>	<b>813·0</b>	<b>69</b>	<b>216</b>	<b>21</b>	<b>214</b>	<b>17</b>	<b>94</b>	<b>7</b>	<b>287</b>	<b>22</b>	<b>2</b>	<b>2</b>	<b>2</b>

\*The percentages in the column do not total upto 100·0 due to rounding off.

During the 1971 Census, data was also collected through a special questionnaire card from the graduates and holders of technical degrees/diplomas and certificates about their activity status. 2,74,353 persons responded who included 81.30 per cent men and 18.70 per cent women. In the absence of data about the existing stock of graduates and technical personnel it is difficult to ascertain the percentage of response. However, among the respondents 9.21 men and 13.20 women reported themselves to be unemployed and seeking job. The percentage distribution of these unemployed men and women by their subject field and educational level is given in Table No. 24.



TABLE-24

*Distribution of unemployed graduates responding to the special questionnaire of 1971 census by subject-fields and educational level*

Subject Field	Percentage by Distribution of Unemployed Persons by Level of Education EDUCATIONAL STANDARDS						Percentage of Unemployed Persons among Respondents by Subject Field					
	Doctorate	Master/Post- Graduate	Bachelor or Equivalent	Diploma	Certificate		Male	Female	Male	Female	Male	Female
1	2	3	4	5	6	7	8	9	10	11	12	13
1. Arts & Humanities . . .	0·23	0·65	27·58	41·54	71·96	57·48	0·08	0·14	0·15	0·19	8·21	13·35
2. Commerce . . .	0·08	..	29·01	42·86	70·91	57·14	..	..	..	..	7·86	5·30
3. Agriculture . . .	0·73	..	18·94	15·38	80·15	69·24	0·12	15·38	0·06	..	17·05	12·94
4. Veterinary Science/Medicine . . .	3·03	..	9·09	..	80·30	66·67	7·58	..	..	33·33	4·73	8·77
5. Science . . .	0·93	1·40	27·45	53·30	71·43	45·30	0·15	..	0·04	..	11·62	13·35
6. Engineering Technology . . .	0·29	..	2·97	2·63	33·51	31·58	60·73	60·53	2·50	5·26	9·69	18·45
7. Medicine (Allopathy) . . .	2·35	4·17	17·65	8·33	74·12	87·50	3·53	..	2·35	..	2·27	4·11
8. Medicine (Others) . . .	2·53	7·14	12·60	7·14	68·91	71·43	12·60	7·14	3·36	7·15	0·60	6·19
9. Nursing . . .	50·00	..	..	..	..	..	50·00	..	..	..	5·56	..

10. Technical & Vocational trades	.	.	..	..	1·11	10·00	2·78	10·00	42·22	40·00	53·89	40·00	10·51	34·48
11. Others	.	.	6·34	7·94	37·32	65·08	10·56	1·09	26·76	22·22	19·02	3·17	6·18	14·52
<hr/>														
12. Percentage of Unemployed among Respondents by Educational Level	0·53	0·83	24·52	42·62	68·18	55·52	5·84	0·74	0·93	0·29	9·21	13·20		

13. No. of Persons Reporting Unemployment	.	109	56	5,039	2,887	14,008	3,761	1,200	50	191	20	20,545	6,774
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Source : G-Series data obtained from the Registrar General.

The estimates about the unemployment among special category of educated unemployed made by the Planning Departments of Uttar Pradesh Government, are given in Table-25.

TABLE-25

*Estimated number of unemployed persons having technical qualification*

Category	No. of Unemployed at the Beginning of the 4th Plan (June 1969)	Category	No. of Unemployed at the Beginning of the 4th Plan (June 1969)
1	2	3	4
Degree Holders		Engineers	Diploma Holders
Civil Engineering . . .	232	Civil	700
Mechanical Engineering . . .	176	Mechanical	893
Electrical Engineering . . .	128	Electrical	552
Chemical Engineering . . .	26		
Mining Engineering . . .	3		
Metallurgy . . .	18		
Architecture . . .	28		
Tele-communication . . .	21		
<i>Agricultural personnel :</i>			
Post-Graduates . . .	175		<i>Teachers :</i>
Graduates . . .	3,818		for primary Schools
Diploma Holders . . .	170		Male 2,711
<i>Veterinary personnel :</i>			Female 421
Graduates . . .	17		<i>For senior basic/middle schools</i>
Stockmen Group . . .	..		Male 1,307
Compo-ander . . .	..		Female 393
			<i>for higher secondary Schools</i> 1,216
			Cr. Sc. Teacher 10
			Pre-Primary School Teachers (Female) 36

*Sources : (1) Supply of Engineering Manpower in U.P. (1969-70) Govt. of U.P. Planning Department.*

*(2) Supply of Agricultural Personnel in U.P. (1969-74).*

*(3) Supply of Veterinary Science Graduates and Other Workers during the 4th Plan Govt. of U.P.*

*(4) Supply of Teachers during the 4th Plan Period. Govt. of U.P.*

According to the estimates of the Planning Department of U.P. Government about 30,18 graduates and 8,827 diploma holders among Engineering manpower would be surplus by the end of the 4th Plan. The data of the 20th Round of NSS (1965-66) on the distribution of the unemployed persons according to the educational standard are given in the Table-26.

TABLE-26

*Percentage distribution of unemployed persons in urban U.P. by educational standard as per 20th round of survey 1965-66*

Educational Standard 1	Male 2	Female 3	Total 4
1. Illiterate . . . . .	26.08	100.00	29.16
2. Literate but below Secondary . . .	26.09	..	25.00
3. Secondary . . . . .	39.13	..	37.50
4. Below Graduation Technically trained . .	4.35	..	4.17
5. Graduation and above . . . . .	4.35	..	4.17

#### Registration with Employment Exchanges :

62.50% of the unemployed were registered with the employment exchanges. Among the unemployed males the percentage of those registered with the employment exchanges was 65.22 but among unemployed females none was found to be registered with the employment exchanges.

It may be stated that the conclusions in the report on the 20th Round had been drawn on the basis of information available for 20 persons (19 men and one woman) only who had been found to be unemployed. Therefore, the reliability of these data can not be vouch safed.

During the period 1965-66 and 1966-67 a survey had been undertaken by the Directorate of Economics and Statistics, Government of Uttar Pradesh to assess the extent of unemployment in the urban areas of Uttar Pradesh. The definition adopted in respect of unemployment for that Survey was : "a member of the household who was available for gainful employment, but could not secure one on any of the days of the week preceding the date of enquiry". The definition did not prescribe any age limit and also did not insist on the effective search for employment either through registration with the employment exchanges or through contracting the employers. The state was divided into five regions in order to get results at the regional levels besides the state level. The regions were :

- (a) *Hilly region*.—Districts of Dehradun, Nainital, Almora, Garhwal, and Tehri Garhwal.
- (b) *Western region*.—Agra, Aligarh, Bareilly, Bijnor, Badaun, Bulandshahar, Etah, Etawah, Farrukhabad, Mainpuri, Mathura, Meerut, Muradabad, Muzzaffarnagar, Pilibhit, Rampur, Saharanpur, and Sahajahanpur.

- (c) *Central region.*—Bara Banki, Fatehpur, Hardoi, Kanpur, Lakhimpur-Kheri, Lucknow, Rae Bareli, Sitapur, and Unnao.
- (d) *Eastern region.*—Azamgarh, Bahrach, Ballia, Basti, Deoria, Allahabad, Faizabad, Ghazipur, Gonda, Gorakhpur, Jaunpur, Mirzapur, Partapgarh, Sultanpur, and Varanasi.
- (e) *Bundelkhand region.*—Banda, Hamirpur, Jalaun, and Jhansi.

From each of the districts, six urban blocks were selected for survey. Each block was visited twice during a year at an interval of six months to collect the information. The result of the survey published in the Bulletin No. 120, "Uttar Pradesh Ke Nagriya Kshetron Me Berojgari"—1965-66 and 1966-67 bring to light the following facts :

- (i) The percentage of the unemployed to the total population of the State was 0.25. The regional percentage of the unemployed was 0.27 in the Hilly Region, 0.22 in the Western Region, 0.19 in the Central Region, 0.26 in the Western Region and 0.56 in the Bundelkhand Region. In all the four visits, the percentage of unemployeds to the total population was found to be more than 0.56 per cent in Bundelkhand Region. In the Hilly Region as well as the Eastern Region the unemployment evinced a declining trend.
- (ii) Among the unemployeds the percentage of women was only 3.7 in the State. In the regions the corresponding percentages were Hilly 2.9, Western 4.0, Central 2.9, Eastern 5.4, and Bundelkhand 1.1. Due to poverty in Eastern Region the percentage of women offering for employment and not securing it was highest.
- (iii) Among the unemployeds, the percentage of children (below 15 years) and old men (above 60 years of age) was 2.2% in the State. The percentage in the Hilly Region was 3.8%, Western Region 1.47%, Central Region 3.5%, Eastern Region 3.6%, and Bundelkhand 0.1%.
- (iv) In the State among the unemployeds 43.8% had been without employment for more than six months. The percentage of such unemployeds was highest in Hilly Region (61.3%) followed by Eastern Region (49.2%).
- (v) 23.1% of the unemployeds were illiterate, 46.3 were literates below Matriculation. Only 30.6% has passed Matriculation or higher examination. 86.6% of the unemployed had no technical education. 12% had technical education with certificate and one per cent with diploma. The percentage of the diploma holders was higher (23.9%) in Hilly Region and lowest in Bundelkhand (2.1%).
- (vi) The percentage of the unemployeds registered with employment exchanges was 38.5 for the whole State. For the regions it was 54.8—Hilly Region, 33.6—Western Region, 52.4—Central Region, 40.6—Eastern Region, and 26.7—Bundelkhand.

#### **Employment Exchange Data :**

The figures of job seekers registered with the employment exchanges also throw some light on unemployment. In the Table No. 27 the figures of registrants on the live register of employment exchange as on 31st December of the years 1966 to 1971 are given. The data indicate steady rise in the number of job seekers from 1964 onwards.

TABLE-27

*Number of registrants on the live register of employment exchanges  
(1966-71)*

Year	Number of Persons registered with Employment Exchange	Percentage of the Number of Registrants on 31-12-1966
1966 . . . . .	3,31,300	100.00
1967 . . . . .	2,96,300	89.44
1968 . . . . .	2,97,800	89.89
1969 . . . . .	3,28,700	99.22
1970 . . . . .	4,32,500	130.55
1971 . . . . .	5,36,748	162.01

*Source : D.G.E.T., New Delhi.*

The Directorate of Training and Employment, Uttar Pradesh had calculated the rate of growth per annum in the registration of educated job seekers by zones as given in Table-28.

TABLE-28

*Growth rate in the annual registration in Uttar Pradesh (1961-68)*

Zone	Districts Comprising the Zone	Growth Rate per Annum between 1961-68
1	2	3
1. Western Zone . . .	Agra, Aligarh, Badaun, Bareilly, Bijnor, Buland Sharar, Etah, Etawah, Mainpuri, Mathura, Meerut, Moradabad, Muzzaffarnagar, Pilibhit, Rampur, Saharanpur, and Fatehgarh.	0.7%
2. Central Zone . . .	Banda, Bara Banki, Fatehpur, Hamirpur, Hardoi, Jalaun, Jhansi, Kanpur, Lakhimpur, Lucknow, Rae Barelli, Sitapur, and Unnao.	6.9%
3. Eastern Zone . . .	Allahabad, Azamgarh, Ballia, Deoria, Basti, Bahraich, Faizabad, Ghazipur, Gonda, Gorakhpur, Jaunpur, Mirzapur, Pantnagar, Sultanpur, and Varanasi.	6.4%
4. Hill Zone . . .	Nainital, Almora, Dehradun, Pauri Garhwal, Tehri Garhwal, Pithoragarh, Champoli, and Uttar Kashi.	4.6%

It has been observed that the higher growth rate in Central and Eastern zones represents higher unemployment those zones and it can be broadly attributed to the fact that bulk of population in those two zones still continues to be dependent on agriculture. The pace of industrialisation has been very slow. This has impeded the growth of employment opportunities suitable for educated persons.

*Source : A Study of Unemployment amongst Educated Persons in Uttar Pradesh.*

The percentage of educated job seekers who had passed matriculation or a higher examination has also been increasing. The figures for the years 1968 and 1971 are given in the Table-29.

TABLE-29

*Percentage of educated job seekers on the live register of employment exchange*

	Percentage Of Educated Job Seekers to the Total					Total
	All Job Seekers	Matriculates	Intermediates & Higher Secondary	Graduates and Post-Graduates		
31-12-68 . . .	13,813	1,694	843	855	3,392	
31-12-71 . . .	5,36,748	1,03,347	87,411	40,753	2,31,711	
Percent change . . .	3,785.81	6,012.57	10,269.04	4,666.43	6,731.10	

*Source : D.G.E.T., New Delhi.*

The classification of the registrants by the type of occupation sought is given in Table No. 30.

TABLE-30

*Percentage distribution of registrants (as on 31-12-1971) by type of occupation sought*

Type of Occupation Sought	Percentage of Registrants
1. Professional, Technical and Related Services . . . . .	5.84
2. Administrative, Executive, and Management Services . . . . .	0.07
3. Clerical and Related Services . . . . .	2.40
4. Sales Services . . . . .	0.01
5. Farmers, Fishermen, Hunters, Loggers and Related Services . . . . .	0.27
6. Miners, Quarrymen and Related Services . . . . .	0.02
7. Transport and Communication Services . . . . .	1.36
8. Craftsmen, Production process workers and Labour Services not elsewhere classified . . . . .	6.58
9. Service, Sports, and Recreation Services . . . . .	5.30
10. Services not Classified by Occupations . . . . .	78.15

The above distribution indicates that most of the job seekers are not specific about the occupation.

The above figures do not present the accurate picture of unemployment due to the fact that (1) all unemployed persons do not get themselves registered with the employment exchanges (2) even some employed persons continue their registration with the employment exchanges for better or alternative employment opportunities. The Department of Economics and Statistics had conducted surveys in 1960-61, 1963-64 and 1967-68 to find out the percentage of unemployed persons seeking the help of employment exchanges for securing jobs. The percentage of unemployed persons in urban areas registered with employment exchanges by educational standard according to the findings of the surveys is given in Table-31.

TABLE-31

*Percentage of unemployed persons registered with employment exchanges*

Educational Standard	Percentage Registered		
	1960-61	1963-64	1967-68
Matric but below Graduates . . . .	64.0	71.36	71.59
Graduates and above . . . .	60.0	69.82	70.05
All educated persons . . . .	63.6	71.17	71.42

*Source : A Study of Unemployment among Educated Persons 1970 by Director of Training and Employment, J.P.*

However, the data do not help in ascertaining the extent of unemployment through the data provided by employment exchanges. Due to the increase in the number of employment exchanges and also in the number of educated persons seeking the help of employment exchanges it does not seem appropriate to apply the above percentages to assess the extent of unemployment.

#### **The poverty line :**

Rath & Dandekar, in "Poverty in India" have observed that in 1961-62, the percentage of rural population of the State with an inadequate intake of calories was 18.13. They had an annual *per capita* income of Rs. 146 and were below the poverty line. In the urban areas the percentage of such persons was 37.65 and their *per capita* income was Rs. 220 per annum. The sub-committee appointed by the Federation of Indian Chambers of Commerce under the Chairmanship of Dr. Bharat Ram in their report "Planning for Results" have estimated the percentage of population below the poverty line for the year 1969-1970 as 44.8 per cent. Such persons numbered 38.6 million. According to the sub-committee, "most of the urban poors are the unemployed wage earners mainly those who have migrated from the rural side in search of jobs. In rural sector the bulk of the poor are the agricultural labourers who are only seasonally employed and small farmers."

**Special surveys :**

(1) *Rural Labour households :*

In the 19th Round of the NSS (1964-65) enquiry was also conducted on employment, unemployment and indebtedness of rural labour households (households classified on the basis of their major sources of income being wage paid manual labour—agricultural and or non-agricultural). The interesting findings published in the Report "Employment, Unemployment and Indebtedness in Rural Labour Households in Uttar Pradesh 1964-65" are summarised in the subsequent paragraphs.

(i) Among the rural labour households 69 per cent were found to belong to scheduled castes and 1.5 per cent to scheduled tribes. The remaining 30 per cent or so fall within the residual category 'Others'. Among the agricultural labour household, 70.57% belonged to scheduled castes, 1.51% to scheduled tribes and 27.62% to others.

(ii) 40.47% of Agricultural Labour households possessed some land. The distribution of agricultural labour households belonging to scheduled castes and scheduled tribes in respect of the possession of land was even. Other rural labour households also were evenly distributed as regards possession of land. However, the percentage of households having land was lower than those not having land in case of scheduled castes and scheduled tribe households among them.

(iii) The average size of the rural labour household was 4.61 of which only 1.75 were workers. They consisted of 1.56 agricultural labourers, 0.13 non-agricultural labourers and 0.06 workers having other occupations. The percentage of agricultural labourers in the household come to 89. In case of agricultural labour household, this percentage was as high as 96, while in non-agricultural labour households 72 per cent persons had some non-agricultural work as their main activity.

(iv) The percentage distribution of population of rural labour households according to work pattern is given in Table-32.

TABLE-32

*Percentage distribution of population of rural labour households according to work pattern*

Household Group	Livelihood Type	Work Pattern		
		Employed	Unemployed	Out of Labour Force
All Rural Labour Households	All Households	36.47	3.30	60.23
	Agricultural Labour Households	36.63	3.39	59.98
Scheduled Caste Households	All Households	37.33	3.49	59.18
	Agricultural Labour Households	37.36	3.54	59.10

Source : 19th Round of NSS Report on "Employment, Unemployment and Indebtedness in Rural Labour Households in Uttar Pradesh 1964-65", issued by the Directorate of Economics & Statistics, U.P.

Thus the work pattern among the households belonging to scheduled caste and those belonging to others was similar.

(v) The number of days per person employed during the year in all occupations is given in Table-33.

TABLE--33

*Number of days of employment per person during the year*

Category of Workers	Scheduled Caste	Scheduled Tribe	Others	All Household
1	2	3	4	5
<b>Agricultural labour households</b>				
(A) Adult Male :				
(a) Agricultural Labour . . .	337	342	340	338
(b) Non-agricultural Labour . . .	307	..	361	324
(c) Other Occupations . . .	328	..	341	332
(d) All Occupations . . .	331	342	334	332
(B) Adult female :				
(a) Agricultural Labour . . .	319	333	301	317
(b) Non-agricultural Labour . . .	256	293	236	256
(c) Other Occupations . . .	296	..	248	284
(d) All Occupations . . .	314	328	292	311
(C) Children :				
(a) Agricultural Labour . . .	336	293	294	327
(b) Non-agricultural Labour . . .	274	..	235	266
(c) Other Occupations . . .	207	..	365	256
(d) All Occupations . . .	312	293	300	329
<b>All rural labour households :</b>				
(A) Adult Male :				
(a) Agricultural Labour . . .	337	342	340	338
(b) Non-agricultural Labour . . .	343	..	343	343
(c) Other Occupations . . .	319	365	352	333
(d) All Occupations . . .	332	342	335	333
(B) Adult female :				
(a) Agricultural Labour . . .	319	337	305	317
(b) Non-agricultural Labour . . .	302	293	290	298
(c) Other Occupations . . .	305	..	261	292
(d) All Occupations . . .	315	332	297	312
(C) Children :				
(a) Agricultural Labour . . .	335	293	284	323
(b) Non-agricultural Labour . . .	286	..	300	248
(c) Other Occupations . . .	223	..	365	276
(d) All Occupations . . .	304	293	300	303

The above figures indicate that in the rural Uttar Pradesh, the working members of rural labour households had work for over three hundred days and there was hardly any difference in this respect among the Scheduled Caste, Scheduled Tribe and other rural labour households.

(2) *25th round of survey:*

In the 25th Round of Survey (July, 1970 to June, 1971) the NSS had covered small cultivator households (the lowest 10 per cent of the households having cultivated land) and non-cultivating wage earner households (households having no cultivated land and having wage paid employment as their means of livelihood) for enquiry which *inter alia* included their economic activities relating to employment and unemployment. Some of the data emanating from that enquiry are now available. The interesting findings are given in the following paragraphs.

(i) The participation rate in terms of mandays of employment (at work and with work but not at work) and mandays unemployment taken together is given in Table-34.

TABLE-34

*Age-sex specific participation rate in the weaker section of population*

Age Group	Male		Female		Persons	
	Cultivators	Non-Cultivating Wage Earners	Small Cultivators	Non-Cultivating Wage Earners	Small Cultivators	Non-Cultivating Wage Earners
0-9 . .	2.0	2.2	1.5	1.6	2.3	1.9
10-14 . .	27.2	17.9	17.3	11.3	22.8	15.2
15-44 . .	92.9	93.3	32.9	25.6	66.0	61.7
45-59 . .	95.7	86.6	30.6	36.9	66.3	66.8
60 & above .	78.6	67.4	21.1	15.9	48.1	36.5
All ages .	56.3	54.2	20.2	16.2	39.9	36.0

The above table has been compiled on the basis of the data pertaining to the percentage distribution of estimated number of mandays spent per week under different types of economic and other activities by persons belonging to various age-sex groups.

From the above table it is seen that the participation rate was lower among the persons belonging to non-cultivating wage earners obviously as their employment was dependent on demand from others.

(ii) As this data is based on the mandays approach it reveals that in the small cultivator households unemployment prevailed to the extent of 1.0% of the available mandays. It was highest 1.6% in the age group 15-55. It includes

the available days of the persons with work and also those without work and seeking or available for it. Among the non-cultivating wage earner households the percentage of the days of unemployment (seeking and/or available for work) was 1.2 (for all ages) and highest (2.5%) in the age group 15-44 which is indicative of new entrants.

(iii) The percentage of households reported possibility of supplementing income by taking up ancillary agricultural activities of finance is made available is given in Table-35.

**TABLE-35**  
*Percentage of households reporting possibility of taking up ancillary agricultural activities*

Agricultural Activity	Percentage of Households Reporting Possibility	
	Small Cultivator Households	Non-cultivating Wage Earners' Households
1. Dairying . . . . .	24.8	41.1
2. Poultry . . . . .	3.9	9.5
3. Fishing . . . . .	5.5	4.4
4. Other Animal Production . . . . .	1.9	6.0
5. Others . . . . .	1.5	4.3

As the households have been repeated under the different activity groups, it is not possible to state what was the percentage of such households in the total households belonging to the two sections. 55.2% of the small cultivator households and 69.1% of the non-cultivator wage earners households needed Rs. 1,000 and above for this purpose. Nearly 69% of the small cultivator households and 54% of the non-cultivator wage earners' households indicated no possibility of supplementing their income.

(iv) The percentage of households having knowledge of any trade/occupation is given in the Table No. 36.

**TABLE-36**  
*Percentage of households reporting knowledge of non-agricultural trades.*

Occupation Group	Percentage of Households	
	Small Cultivators	Non-cultivating Wage Earner
(1) Occupations covered by manufacturing activities . . . . .	14.0	10.2
(2) Occupations covered by trading activities . . . . .	80.4	82.1
(3) Occupation relating to transport	2.1	7.3
(4) Occupation relating to personal services . . . . .	2.1	..
(5) Other services . . . . .	1.4	0.4

(v) 61.2% of the small cultivator households and 52.9% of the non-cultivating wage earners' households were unwilling to take up full-time alternative employment. The distribution of the remaining households by net income derived and location of work is given in Table-37.

TABLE-37

*Percentage distribution of households having persons willing to take up full-time wage paid employment by location preference*

Net Income in Rupees	Percentage of Households		Willing for full-time Employment					
	Within Village		Outside village With Guaranteed Regular Employ- ment		Outside village Without Guar- anteed Employment		Total	
	C	NC	C	NC	C	NC	C	NC
Less than 299	0.3	0.5	0.4	0.1	..	..	0.7	0.6
300—599	1.2	0.3	1.4	0.9	1.0	0.4	3.6	1.6
600—999	4.9	3.0	3.5	3.8	1.6	1.6	10.0	8.4
1,000—1,999	7.6	6.7	9.4	15.5	3.9	4.6	20.9	26.8
2,000—2,999	0.3	1.6	1.7	4.0	0.5	0.6	2.5	6.2
3000 and above	0.4	0.2	0.6	2.7	0.1	0.6	1.1	3.5
<b>TOTAL</b>	<b>.</b>	<b>14.7</b>	<b>12.3</b>	<b>17.0</b>	<b>27.0</b>	<b>7.1</b>	<b>7.8</b>	<b>38.8</b>
								<b>47.1</b>

C = Small cultivator households.

NC = Non-cultivating wage earner households.

The percentage of non-cultivating wage earner household was more in respect of employment out of the village, obviously due to the non-attachment to land. However, among both the groups the majority desired for a net income between Rs. 1,000 to 1,999 per annum. The next income-range according to preference was 600—999.

(vi) Among the persons willing to take up employment outside village, the majority was of males. Among these belonging to small cultivator households, 99% were males and 1% were females. The females were all illiterate and roughly 87% were in the age group 15-44 and the rest in the age group 45-59.

(vii) Among these belonging to non-cultivating wage earner households the percentage of males was roughly 98% and of the females only two per cent. The women were all illiterate. 71% of those females belonged to the age group 15-44 and the rest to 45-59.

TABLE-38

*Percentage distribution of persons willing to take up employment outside the village by educational standard and age groups*

Educational Standard	Percentage of Persons Willing to take up Employment Outside their Villages						Total
	0-9	10-14	15-44	45-49	60 & above		
Illiterate . . . .	..	88.32	81.21	90.03	100	82.47	
Literate but below Primary	..	11.68	9.29	5.97	..	8.92	
Primary . . . .	..	..	5.62	4.00	..	5.23	
Middle . . . .	..	..	2.52	..	..	2.19	
Secondary . . . .	..	..	1.36	..	..	1.19	
Above Secondary . . . .	..	..	..	..	..	..	

(viii) Out of the male labourers willing to take up employment outside their village, 87.36% sought work in public works, 0.85% clerical job, 0.34% non-clerical non-manual work, 0.68% manual works (skilled), 10.77% manual works (unskilled).

(ix) In the non-cultivating wage earner households, the percentage of males was 98% and the females only 2%. The women labourers were all illiterate, 71% of them belonged to the age group 15-44 and the rest to 45-59 years. The percentage distribution of male labour by age and educational standard is given in the Table-39.

TABLE-39

*Distribution of persons in non-cultivating households willing to take up employment outside the village by age group and educational standards*

Educational Standard	Age Groups						
	0-9	10-14	15-44	45-59	60 and above	Total	
1	2	3	4	5	6	7	
Illiterate . . . .	..	83.03	73.01	97.31	100	77.44	
Literate but below Primary . . . .	..	4.28	12.93	2.69	..	10.84	
Primary . . . .	..	..	8.18	..	..	6.44	
Middle . . . .	..	4.27	4.38	..	..	3.66	
Secondary . . . .	..	8.42	1.50	..	..	1.62	
Above Secondary . . . .	..	..	..	..	..	..	

Of these male and female labour willing to take up work outside their villages 89.56% opted for employment on public works, 0.10% for clerical jobs, 0.21% for manual (skilled) jobs and 10.12% for manual (unskilled) jobs.

## SUMMARY

The data on unemployment emerging from some of the latest NSS surveys and 1971 as well as 1961 Census are given in Table—40.

TABLE-40

*Some data on unemployment in Uttar Pradesh*

Source	1	Percentage of Unemploy- ed Person to Popula- tion			Percentage of Unemploy- ed Person to Labour Force		
		State 2	Rural 3	Urban 4	State 6	Rural 7	Urban 8
1971 Census*	Total	0.40	0.33	0.84	1.23	0.99	2.80
	Male	0.62	0.49	1.42	1.16	0.90	2.80
	Female	0.15	0.15	0.17	1.68	1.53	3.80
1961 Census	Total	0.12	0.06	0.51	0.30	0.14	1.62
	Male	0.22	0.11	0.91	0.37	0.18	1.72
	Female	0.09	0.01	0.02	0.06	0.04	0.43
23rd Round of NSS (1969-70)*	Total	NA	0.04	NA	NA	0.08	NA
	Male	NA	0.04	NA	NA	0.22	NA
	Female	NA	0.04	NA	NA	0.11	NA
21st Round of NSS (Central Strata)	Total	NA	NA	0.10	NA	NA	0.66
	Male	NA	NA	0.33	NA	NA	0.67
	Female	NA	NA	0.04	NA	NA	0.57

\*The percentages refer to persons categorised as "non-workers—others".

The Planning Department calculated the backlog of unemployment at the beginning of the 4th Plan as 23.94 lakhs.

According to 1971 Census the number of persons in the category 'Non-workers—others' (which is supposed to account for unemployed persons mostly) was 3,52,706 (2,43,500 rural and 1,04,200 urban).

#### Underemployment:

(i) According to 19th Round of NSS (1964-65) 4.42 per cent of male workers and 34.56 female workers were found to have worked for less than 28 hours in the reference week.

Only nine per cent of working population was available for additional work.

(ii) According to the 23rd Round of NSS (1968-69) only 10 per cent of the workers were underemployed, but only 0.76 per cent of them were willing to have additional work for extra hours.

### WEST BENGAL

According to the 1971 Census the population of West Bengal was 44.44 millions—23.49 million males and 20.95 million females.

#### **Labour force, unemployment and employment:**

The data on Labour force characteristics, Unemployment and Employment collected during 1961 are presented in the following three tables.

Table 1.

Table 2.

Table 3.



TABLE-I

Distribution of labour force, 1961

Age Group	Urban						Rural								
	Working Population			Non-working Population but Seeking Employment			Working Population			Non-working Population but Seeking Employment					
	M	F	P	M	F	P	M	F	P	M	F	P			
1	2	3	4	5	6	7	8	9	10	11	12	13			
0-14.	.	.	.	2.15	0.24	1.23	0.22	..	0.11	5.76	1.51	3.68	0.12	0.02	0.07
15-34	.	.	.	74.39	6.79	48.54	7.53	1.21	5.11	86.25	17.83	52.52	2.46	0.17	1.33
35-59	.	.	.	90.95	12.69	64.34	3.55	0.64	2.55	95.28	19.85	61.14	0.87	0.10	0.52
60+	.	.	.	47.84	4.69	26.52	2.45	0.16	1.32	73.72	8.78	40.48	0.64	0.15	0.39
Age not stated	.	.	33.33	..	16.67	..	..	..	42.31	7.32	26.88	..	..	..	..
TOTAL	.	55.38	5.12	34.66	4.08	0.55	2.63	53.46	10.62	32.67	1.04	0.09	0.58		

TABLE-2

*The percentage distribution of persons in labour force by activity and education, 1961*

Education	Urban						Rural					
	Working Population			Unemployed			Working Population			Unemployed		
	M	F	P	M	F	P	M	F	P	M	F	P
1	2	3	4	5	6	7	8	9	10	11	12	13
Illiterate . . . .	34.60	68.80	36.68	26.55	34.36	27.24	60.10	96.90	65.91	28.34	83.34	32.84
Literate without ednl. level . . . .	32.63	12.16	31.37	29.58	20.51	28.78	25.14	2.10	21.50	27.98	7.84	26.56
Primary or Jr. basic . . . .	17.08	6.55	16.44	25.86	20.00	25.34	12.34	0.79	10.52	30.60	4.90	28.78
Matriculation & above . . . .	15.70	12.49	15.51	13.01	25.13	18.64	2.42	0.21	2.07	13.29	3.90	12.62
Total . . . .	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

TABLE-3

No. of unemployed persons (aged 15 and above) by educational level, sex,  
1961

(in '000)

Educational Level	Urban			Rural			
	M	F	Total	M	F	Total	
1	2	3	4	5	6	7	
Illiterate	. . .	53.49	6.67	60.16	37.7	8.52	46.23
Literate without educational level.	. . .	59.62	3.96	63.50	37.52	0.81	38.33
Primary or junior basic	. .	52.09	3.90	55.99	40.99	0.46	41.45
Matriculation and above	. .	36.25	4.96	41.31	17.86	0.37	18.23
<b>TOTAL</b>	. .	201.45	19.49	220.94	134.08	10.16	144.24

The working population and its share to the total population as observed in the 1971 Census was as given in Table-4 below :

TABLE-4  
*Working population—1971 Census*

	Total Population (in millions)			Working Popula- tion (in millions)			% of Working Population to Total Population			
	P	M	F	P	M	F	P	M	F	
1	2	3	4	5	6	7	8	9	10	
Total	. . .	44.44	23.49	20.95	12.60	11.48	1.12	28.37	48.89	5.36
Rural	. . .	33.51	17.26	16.25	9.28	8.38	0.90	27.69	48.54	5.54
Urban	. . .	10.93	6.23	4.70	3.32	3.10	0.22	30.45	49.87	4.74

#### Unemployed Engineers :

In August, 1966 the Directorate of National Employment Service in West Bengal undertook a sample survey of the registered engineers to find out the following :

1. Are all the Graduate Engineers registered in Employment Exchanges, actually residing within the State or outside but have registered as residents in West Bengal by furnishing a local address.

2. Are all the registered persons unemployed as reported by them at the time of registration or are they employed and seeking better employment?
3. Is the unemployment due to imperfection in the labour market?
4. Has this number any significance in the context of further expansion of Tech. Educational facilities?
5. Whether all of them have secured degree through regular Engineering Colleges or have they passed Institutional Examinations such as A.M.I.E.?

In all 175 Graduate Engineers were included in the sample and a questionnaire was mailed to them. 93 graduate engineers responded, 31 were residing outside the State and 51 could not be contacted. The findings of the Study were as follows :

1. Out of 93 respondents, 36 were employed. 52.8% of the Employed Respondents were in the private sector and 47.2% were in the public sector. Of 47.2%, 13.9% were employed in Central Government, 2.8% in State Government and 30.5% in Quasi-Government Establishments and Local Bodies. Of the 36 Employed Respondents, 7 were employed in construction, 20 were in services, 3 were in Electric and Water Supply undertakings etc., and the remaining 6 in manufacturing.

2. Among 57 unemployed Engineers, 23 were holding First Class degrees in different branches of Engineering—7 in Civil Engineering, 7 in Mechanical Engineering, 3 in Electrical Engineering, 2 in Tele-communication Engineering and 4 in Chemical Engineering.

3. Among 57 unemployed Engineers, 25 had completed their Education in 1966, 20 in 1965 and 5 in 1964. The remaining 7 had completed their education prior to 1964.

#### **Extent of Unemployment :**

In 1963, the Bureau of Applied Economics and Statistics undertook a state-wise survey to measure the extent and magnitude of unemployment in West Bengal. According to the findings of the study there were about 4.69 lakhs unemployed persons in the entire State in 1963. The urban areas having 25% persons of the total population accounted for 39% of the unemployed persons. Taking the population in 1963 to be 379 lakhs, the percentage of unemployed persons to total population comes to 1.24. If the persons who were found to have full-time employment for one day only during the week preceding the day of enquiry, are added to the persons without ful-time employment during any day of the last week, the percentage rises to more than 4 i.e. about a three fold increase. Similarly if the persons who were employed for a period of less than half of the last week were also added to the number of unemployed persons, the percentage of unemployed to the total population worked out to be 5.65.

There were about 469 thousand unemployed persons in the State of which 116 thousands that is 25 per cent belonged to the 'Middle Class' families and 133 thousands that is 75 per cent to 'other class' families. 'Middle-Class' family represented such classes of families as are engaged in learned occupations or occupation which require a minimum standard of education. All other families were grouped as 'Other Class' families.

50 per cent of the unemployed persons of the urban areas belonged to the "Middle Class" families and only 9 per cent of the unemployed persons of the rural areas belonged to the "Middle Class" families. There were about 26 thousand unemployed females in the urban areas of which 62 per cent belonged to "Middle Class" families and there were about 43 thousand unemployed females in the rural areas who practically all belonged to the "Other Class" families. Of the 184 thousand unemployed persons of the urban areas, about 22 thousand i.e. 12 per cent were illiterate, about 31 thousand i.e. 17 per cent were literate but below upper primary, about 28 thousand i.e. 15 per cent had passed upper primary, about 57 thousand i.e. 31% had passed class VI or Middle English, about 37 thousand i.e. 20 per cent had passed "Secondary Standard" and about 9 thousand i.e. 5 per cent were "Graduates and above". Of the 286 thousand unemployed persons of the rural areas, about 153 thousand i.e. 54 per cent were illiterate, about 51 thousand i.e. 18 per cent were literate but below upper primary, about 25 thousand i.e. 9 per cent had passed upper primary, about 38 thousand i.e. 13 per cent had passed class VI or Middle English, about 15 thousand i.e. 5 per cent had passed "Secondary Standard". "Graduates and above" constituted only 0.5 per cent of the unemployed persons in the rural areas and in the remaining 0.5 per cent cases educational qualifications were not recorded.

In the urban areas of the State, unemployed persons of the age group 15 to 29 years constituted about 80 per cent of the total unemployed persons of the "Middle Class" families and about 69 per cent of the total unemployed persons of the "Other Class" families. In the rural areas of the State, of the total unemployed persons of the "Other Class" families, about 51 per cent belonged to the age group 15 to 29 years and about 24 per cent belonged to the age group 30 to 39 years.

With regard to the educational qualifications, mother tongue, etc., of unemployed persons looking for/or available for work the survey revealed that about 18 per cent of the unemployed persons of the urban areas and about 13 per cent of the unemployed persons of the rural areas were Non-Bengalees. Of the Bengalee unemployed persons of the urban areas 8 per cent were illiterate, 12 per cent were literate but below upper primary, 18 per cent passed upper primary, 33 per cent had passed class VI or Middle English, 23 per cent had passed "Secondary Standard" and 6 per cent were "Graduates and above". Of the Bengalee unemployed persons of the rural areas, 50 per cent were illiterate, 19 per cent were literate but below upper primary, 9 per cent had passed upper primary, 16 per cent had passed class VI or Middle English, 6 per cent had passed "Secondary Standard".

Similarly with regard to the duration of the unemployment the survey revealed that about 41 per cent remained unemployed for less than six months, 23 per cent between six months to one year, 20 per cent between one to two years and 15 per cent for more than two years. Of the unemployed for more than one year, 38 per cent were illiterate and about 26 per cent had passed class Sixth Standard. Similarly out of 469 thousand unemployed persons about 62 per cent had no previous experience that is they were new entrants to the employment market. About 20 per cent had six and more years of experience to their credit.

#### **Seasonal employment :**

With regard to the persons having seasonal unemployment that is not having full-time employment even for one day during the reference week but had some full-time employment during some part of the year, the study

revealed that of the 4.59 lakhs unemployed 1.83 lakhs were in the urban area and 2.86 lakhs in the rural area. Of the urban unemployment about 10.05 thousand persons that is five per cent were seasonally unemployed whereas in the rural areas the percentage was of the order of 56. The unemployment in the rural areas was thus, to a great extent of a seasonal nature. But it was mostly of a regular nature in the urban areas. Of the persons having seasonal unemployment in the urban areas about 56 per cent belonged to the group "Labour" and about 28 per cent belonged to the group "Handicrafts" men (Mainly Manual) considering the major full-time occupation of the persons of the last year. Of the persons having seasonal unemployment in the rural areas about 42 per cent belonged to the occupation group "Owner, tenants, manager, official (agriculture, animal husbandry, forest, fisheries and mines, Non-technical)" and about 52 per cent belonged to the group "Labour" on the basis of their major full-time occupation of last year.

#### **Employment:**

The analysis of data collected regarding full-time employment of persons in 1963 in West Bengal revealed that out of about 1,03,99 thousand persons having some full-time employment during the last-week, about 3,152 thousand persons i.e. 30 per cent had their places of employment in urban areas and about 7,177 thousand persons i.e. 69 per cent had their places of employment in the rural areas. The sector of activity was not specifically mentioned in about one per cent cases. About three per cent of the urban population having some full-time employment during the last week have their places of employment in the rural areas and only one per cent of the rural population having some full-time employment during last week had their employment in the urban areas. Of the total employed persons of the State having their activity in the urban sector, 24 per cent were illiterates, 19 per cent were literates but below primary standard, seven per cent had passed upto primary standard, 34 per cent had passed upto Middle English Standard, 13 per cent had passed upto Secondary Standard and only two per cent were Graduates and above. Amongst total employed persons of the State having their activity in rural sector, 65 per cent were illiterates, 18 per cent were literates but not upto the primary standard, about seven per cent had passed primary standard and seven per cent had passed upto Middle English and about two per cent had passed upto "Secondary Standard".

Similarly the analysis of data collected with regard to the weekly hours of work and days of employment during the last week revealed that out of 1,03,99 thousand persons having some full-time employment last week, 3,203 thousand i.e. about 31 per cent belonged to the urban areas and about 7,197 thousand i.e. about 69 per cent belonged to the rural areas. In the rural areas of the State, out of about 71,97 thousand persons having some full-time employment last week about 5,235 thousand persons i.e. 73 per cent had total full-time and part-time employment for seven days, 5,54 thousand i.e. eight per cent had total full-time and part-time employment for six days, 5,18 thousand persons i.e. seven per cent had total full-time and part-time employment for five days, and 5,55 thousand i.e. eight per cent had total full-time and part-time employment for four days. Thus, in the rural areas about four per cent of the persons having some full-time employment last week do not have total full-time and part-time employment for major part of the last week. In the urban areas, of the 3,203 thousand persons having some full-time employment last week, about 2,795 thousand i.e. 87 per cent had total full-time and part-time employment for seven days, 2,62 thousand i.e. eight per cent had total full-time and part-time employment for six days, about 65 thousand i.e. about 2 per cent had total fulltime and part-time employment for five days and 50 thousand i.e. about two per cent had

total full-time and part-time employment for four days. Thus about one per cent of the persons having some full-time employment last week did not have total full-time and part-time employment for major part of the last week. Of the persons having employment for seven days last week, in the rural areas about nine per cent and in the urban areas about five per cent were found to have five or less hours of work per day on the average during the last week.

#### Labour force :

The study further revealed that the labour force population of the urban areas consisted of about 9,56 thousand persons of the "Middle Class" families and about 2,431 thousand persons of the "Other Class" families. The "Labour Force" population of the rural areas consisted of about 5,26 thousand persons of the "Middle Class" families and about 6,956 thousand persons of the other class families. The "Labour Force" population constitutes about 36 per cent of the total urban population and about 26 per cent of the total rural population.

*Incidence of unemployment in urban and rural areas of the State was as follows :*

Class of Family 1		Urban	Rural	State
		2	3	4
Middle Class*	.	9·6%	4·7%	7·9%
Other Class	.	3·8%	3·7%	3·8%
TOTAL	.	5·4	3·8	4·3

\*Includes all persons engaged in Isolated occupation or occupations which require a minimum standard of education.

The incidence of unemployment was highest in the middle class families of the urban areas and lowest in the other class families of the rural areas. The incidence of unemployment among persons of different educational standards for urban and rural areas separately for 'Middle Class' families were :

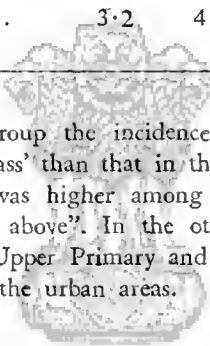
#### (A) Middle Class

Area 1	Illiterate	Literate but below Upper Primary	Upper Primary and Middle English but below Secondary	Secondary and above 5
Urban . . . . .	2·0	7·4	13·3	3·2
Rural . . . . .	0·4	2·3	7·1	5·4
TOTAL . . . . .	0·9	5·5	10·8	7·6

## (B) Other Class

Area	Illiterate	Literate but below Upper Primary	Upper Pri- mary and Middle English but below Secondary	Secondary and above
	1	2	3	4
Urban . . . . .	2·8	4·3	3·8	11·2
Rural . . . . .	3·2	3·8	5·6	21·3
TOTAL . . .	3·2	4·0	4·6	15·2

Excepting the illiterate group the incidence of unemployment was generally higher in the 'Middle Class' than that in the 'Other Class' families. The incidence of unemployment was higher among persons having educational qualifications "Secondary and above". In the other class families of the rural areas and next in order was Upper Primary and Middle English Standard in the 'Middle Class' families in the urban areas.

Unemployment survey, 1971 : 

A survey on almost similar lines conducted in 1963 was undertaken in 1971. The preliminary results of the survey indicate that about 6.93 lakh persons were unemployed, that is, they had no full-time employment during any day of the week and were either looking for/or were available for full-time employment as against 4.69 lakhs in 1967. If the persons having any full-time employment for a period of more than half of the last week were also treated as unemployed and added to the number of unemployed persons then the estimate of unemployed persons comes out to 27 lakhs in 1971 as against 21 lakhs in 1963.

## Unemployment :

The percentage of unemployed persons to the total population was 1.56 in 1971 against 1.24 in 1963. Of the total estimate of 692.9 thousands unemployed 109.06 thousands were in the urban areas and 583.9 thousands in the rural areas. The distribution of unemployed persons, that is, having no full-

time employment during the last week but looking for full-time employment by sex and educational qualifications were:

(in 000)

Educational Qualifications	Rural			Urban		
	M	F	Total	M	F	Total
1	2	3	4	5	6	7
Illiterates . . .	118.3	94.3	212.6 (36)	31.2	45.0	75.2 (70)
Literates but below Matriculation . . .	211.6	9.1	220.7 (38)	20.0	1.9	21.9 (20)
Matriculates and above but below graduates .	84.9	8.9	98.8 (16)	4.2	3.4	7.6 (7)
Graduates & above .	48.3	8.5	56.8 (10)	1.6	1.7	2.3 (3)
<b>TOTAL . .</b>	<b>463.1</b>	<b>120.8</b>	<b>583.9 (100)</b>	<b>57.0</b>	<b>52.0</b>	<b>109.0 (100)</b>

Of the estimated total unemployed persons in 1971 about 84% were looking for full-time employment and about 16 per cent, though not looking for, were available for full-time employment. The distribution of unemployed persons by educational qualifications revealed that though there was a slight increase from 37 to 42 per cent in the percentage of literates amongst the unemployed persons in 1971 compared to 1963 there was an appreciable drop in the percentage from 49 to 35 in the case of literates but below Matriculation. The percentage of graduates and above was about nine per cent in 1971 as against the corresponding figure of three per cent in 1963.

The incidence of unemployment was 5.4 as against 4.3 in 1963. This means that about five per cent of the labour population remained unemployed in 1971 as against about four per cent in 1963.

#### Employment :

The estimated number of employed persons that is the number of persons having some full-time employment during any day of the last week was of the order of 12,188 thousand in 1971 as against 10,399 thousand in 1963. The percentage of unemployed persons to the total population, however, remained

more or less constant during 1971 and 1963, that is, 27.43 and 27.47 respectively. The estimated employment by sex and major occupations during 1971 was :

(Figures in thousand)

Major Occupation of the Family	Male	Female	Total	
	1	2	3	4
Professional, Technical and related workers.	470.6	105.8	576.4 (3)	
Administrative, Executive and Managerial workers.	192.2	24.7	216.9 (2)	
Clerical and related workers . . . .	448.9	24.8	473.7 (4)	
Sales Workers . . . .	841.0	87.7	928.7 (7)	
Farmers, Fishermen, Hunters, Loggers and related workers.	5,919.3	926.7	6,846.0 (56)	
Miners, Quarrymen and related workers	67.1	1.5	68.6 (1)	
Workers in transport and communication Occupation.	305.0	14.9	319.9 (2)	
Craftsmen Production Process workers and Labourers not elsewhere classified.	1,130.5	81.8	1,212.3 (10)	
Service, sports and recreation workers .	889.8	182.2	1,072.0 (9)	
Workers not classifiable by occupation .	344.5	128.9	473.4 (4)	
<b>TOTAL . . . .</b>	<b>10,608.9</b>	<b>1,579.0</b>	<b>12,187.9</b>	

NOTE—Figures in parenthesis indicate the percentages.

Only 13 per cent of the employed persons were females. About 56 per cent of the employed belonged to families having major occupation as farmers, fishermen etc., 10 per cent to craftsmen, production workers etc., 9 per cent to service, sports and recreation and seven per cent to sales, etc.

In the previous paragraphs the results of two sample surveys conducted in 1963 and 1971 are discussed in detail. The following results of these surveys

are given by way of comparison. It may, however, be borne in mind that 1971 survey results are provisional.

Sl. No.	Items	1963 (Survey)	1971 (Survey)
1.	Total number of unemployed persons being defined as having not even one day work during the reference week . . . . .	4.69 lakhs	6.93 lakhs
2.	Number of unemployed persons, a person being considered unemployed if he had no gainful work for 4 days or more during the reference week . . . . .	21.00 lakhs	27.00 lakhs
3.	Percentage of item 1 above to the total population	1.24	1.56
4.	Percentage of literates among those shown in item 1	37.00	42.00
5.	Percentage of illiterate persons among those shown in item 1 . . . . .	49.00	35.00
6.	Percentage of graduates among those in 1 above	3.00	9.00
7.	Estimated number of persons having full time employment . . . . .	1,03,99,000	1,21,88,000
8.	Percentage of employed persons to the total population . . . . .	27.47	27.43

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### APPENDIX-III

#### *Main Findings of the Research Studies*

The Expert Committee on Unemployment sponsored a few studies through the universities and other research institutions for study of different aspects of the problem of unemployment in selected areas. The following is the list of these studies :

Name of the Study	The Areas covered	Objectives of the Study
1. Unemployment in certain selected urban & rural areas of Assam.	Selected rural & urban areas of Assam having peculiar unemployment problem.	To study in depth the problem of unemployment both in rural and urban areas of Assam.
2. Intensified study of the problem of unemployment and underemployment in specific urban and rural areas of Kerala.	Specific urban and rural areas in the State of Kerala.	An intensive study of the problem of unemployment and underemployment in specific urban and rural areas in the State of Kerala.
3. Study of the impact of rural electrification and minor irrigation on rural unemployment in Andhra Pradesh.	Two sets of villages each comprising (i) an electrified as well as irrigated village and (ii) a non-electrified and poorly irrigated village.	To study the effect of electrification and minor irrigation on rural unemployment.
4. Field study of the problem of unemployment in some selected urban and rural areas of West Bengal.	One urban area in Calcutta, one semi-urban area and one rural area near Calcutta.	To study the problem of unemployment, particularly among the educated people in and around Calcutta.
5. Study of employment pattern of the post-graduate students of the University of Calcutta.	All students who got themselves admitted to the M.A., M.Com. and M.Sc. courses in 1966-67 and 1967-68 in the University of Calcutta.	Study of the employment pattern of post-graduate students of the University of Calcutta.

1

2

3

Study for appraisal of schemes for rural employment in Andhra Pradesh.	Nalgonda and Cuddapah are districts of Andhra Pradesh.	To examine the working of the programmes of the crash Schemes for rural employment, the drought prone area programme the small farmers development agency and the scheme for marginal farmers and agricultural labourers.
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7. Employment and unemployment of selected regions of Assam.	Six towns of Kumrup district. To measure the extent of unemployment and to study the employment pattern.
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So far reports on the first two studies have become available and the main findings of these two studies are summarised below :

*The study of problem of unemployment in selected urban and rural areas of West Bengal :*

#### Objectives of the study :

- (a) To test implications of the concepts and definitions of unemployed, underemployed, etc., adopted by various agencies at different times ;
- (b) to examine the degree of closeness between these concepts and definitions ;
- (c) to provide a subjective correspondence between job expectations and qualifications in a particular milieu of actual unemployment situation; and
- (d) to relate the number of the actually unemployed variously defined to the specific population.

#### The Sample :

It was proposed that one urban area in Calcutta, one semi-urban and one rural area near Calcutta will be selected for the study covering a total sample of 5,000 households. The sample distribution was 4,650 urban households, 300 semi-urban households and 50 rural households.

The final distribution of the sample administered in different areas is shown below :

Area	No. of Sample Households
Calcutta proper (Corporation area only) . . . . .	3,036
Calcutta suburbs (Usually included in the Greater Calcutta area).	
South East of Calcutta . . . . .	361
North-West . . . . .	869
North-East . . . . .	782
Balurghat Town . . . . .	297
Purulia Town . . . . .	296
<i>Semi-Urban :</i>	
Taldih . . . . .	50
<i>Rural :</i>	
Gangarampur . . . . .	50
Kumarhat . . . . .	50
<b>Total households</b> . . . . .	<b>5,782</b>

#### Main findings :

Altogether 5,782 households were covered by the survey, involving 37,029 individuals, out of whom 2,956 were identified as unemployed. Of these 5,632 households involving 36,112 individuals, of whom 2,884 could be identified as unemployed were in the urban areas, covering Calcutta proper, suburban Calcutta, divided into North-West, North-East and the South-Eastern suburbs, and two peripheral townships of Balurghat and Purulia.

The primary distribution reveals a pattern, which though somewhat unexpected, has a logic of its own. The ratios of the unemployed to households and population respectively for Calcutta proper, suburban Calcutta and the peripheral townships were as under :

Area	Proportion of the Unemployed to Households (per cent)	Proportion of the Unemployed to number of persons Households (per cent)
Calcutta . . . . .	56.85	9.57
Suburban Calcutta . . . . .	47.42	6.14
Peripheral Township . . . . .	35.03	6.56
All Urban . . . . .	51.03	7.98

It is interesting to note that suburban metropolitan as well as peripheral urban areas have a smaller incidence of unemployment, both in relation to households and number of persons covered by the households.

The income distribution of the sample households shows that 10.00 per cent were with monthly income of less than Rs. 250/-, 29.95 per cent with monthly income of Rs. 250/- to 500/- and the remaining households with monthly income of Rs. 500/-. Profession-wise distribution of the surveyed households showed 38 per cent with clerical work, 19.25 per cent with business and 14.88 per cent as industrial workers. The job aspirations indicated that 64.56 per cent of the present unemployed persons look forward to clerical and school teaching jobs mostly within the income range of Rs. 300/- per month.

Age distribution of the unemployed show the dominance of age group 20 to 24 years old at 56.59 per cent followed by 25 to 30 years old at 20.32 per cent and 15 to 19 years old at 17.30 per cent. Thus 74.91 per cent of the unemployed fall within the age of 24 years and 94.23 per cent within the age of 29 years, revealing the existing unemployment problem to be one of entry and age of generally educated persons.

Consistently with the foregoing, 84.57 per cent of the unemployed are revealed to be men, emphasising, *inter alia*, the middle class character of unemployment as well as the fact that the supposed proletarianization has not yet thrown women into the working force. Similarly, 92.51 per cent of them are unmarried. Considering the age distribution this would primarily appear to be a sociological rather than an economic phenomenon, involving upper caste norms. Understandably, the rural pattern in these as well as in respect of many other facts of the corresponding phenomenon are significantly different. It follows that 77.21 per cent of the unemployed are, by the very nature of the phenomenon, new entrants into the labour force and 64.53 per cent have registered themselves with the Employment Exchanges. Characteristically, the proportions of registrants are the highest for the North-East and North-West suburbs of Calcutta at 80.58 and 74.05 per cent respectively, which may represent one or both of the phenomenon namely, that those are industrial areas and proportionally larger immigrant population of these areas is more enterprising. So much so, that the incidence of employment is lower among them, confirming the fact the 77.21 per cent are new entrants, 73.55 per cent have no previous job or vocational experience.

As regards the nature of efforts made by the unemployed persons to obtain assignments, the recognition that 26.42 per cent of the unemployed are attempting for one to two years and 46.53 per cent for two years or more to obtain a job when read with the proposition that the 24.91 per cent of the unemployed fall within the age of 24, appears to indicate that the socially accepted cut-off point for job entry and economic independence falls heavily at age 22.

An important feature about the unemployed appears to be that as high a proportion of them as 59.57 per cent do not have any idea as regards the kind of retraining or job aptitude as would enable them to obtain employment, nor are they aware of any particular kind of impediments in their acquiring special skills. Only 17.26 per cent regarded financial assistance as being relevant. As large a proportion as 70.21 per cent would not know the next relevant move from where they are placed. Inspite of this, 22.95 plus 8.21 plus 14.94 per cent of the unemployed have reservations about moving to manual, risky or low status jobs respectively.

The definitions of unemployment and underemployment along income dimension alone are likely to be more unrealistic than the time-cum-work dimension. The problem of underemployment is fictitious. Only 0.71 per cent relate underemployment to the lack of scope for utilising one's talent and training, unless one takes the view that the social marginal productivity of school teachers and clerical workers would be very largely less than Rs. 225/- per month, even when considered in terms of the needs of the households.

*A study of the employment pattern of post-graduate students of the Calcutta University :*

The problem of educated unemployment is an important one on which much analytical work has been done in recent times. It was, therefore, decided to focus attention on problems of employment and unemployment among the post-graduates. Two sets of graduates enrolled as post-graduate students in the different Arts, Science and Commerce Departments of the Calcutta University in the years 1962 and 1967 respectively were considered for study. It was decided to send out questionnaires to 1,000 persons chosen by a process of stratified random sampling the student population in each of the two years being stratified into 21 subject groups. The number of sampling units chosen from each year and from each subject group was in proportion to its weight in the corresponding population. 440 questionnaires were sent out to this basis to 1962 graduates and 560 to 1967 graduates.

**Objectives of the study :**

The main objectives behind the inclusion of the 1962 graduates were to compare not so much the unemployment ratio today among the 1962 and the 1967 graduates as the waiting periods before obtaining full-time jobs, the average period of unemployment, the occupational pattern of employment, etc., as between these two sets of graduates. Comparison over a 5-year interval was expected to throw some light on improvement or deterioration in the case of getting jobs for post-graduates specialised in different subjects groups. In particular, some employment aspects like job-nobility, prospects of advancement in jobs for graduates of different subject groups, waiting period, etc. could be more fully ascertained for 1962 graduates and more details on the nature of the labour market in which 1967 graduates were to enter could be secured. A high non-response ratio among 1962 graduates and inadequate finance and time available for follow-up, however, frustrated many of these objectives.

The broad objective of the study was to find out the extent of outright unemployment, the extent of under-employment, the extent of the lack of correspondence between training and job actually performed and its implications for manpower planning. Significant differences, if any, in these aspects between 1962 and 1967 graduates and (for each year) as between the different subjects groups had to be investigated. A variety of other information regarding jobs held, special qualifications acquired, job-satisfaction etc., were also sought to be collected through the questionnaire partly for subsequent potential use and partly to provide cross-checks on the more vital points of information sought from the respondents.

The response ratio for this group was as low as 23%. Of the 440 questionnaires sent out, only 99 were received back from the respondents. Another 41 were returned by the post offices on the ground that addresses could not be traced. In view of such a poor response it was considered injudicious to spend time,

money and effort in following-up non-respondents of this group. Follow-up, therefore, was concentrated solely on 1967 graduates where more promising results were likely.

With so few responses, it was also not possible to concentrate on differences as between the 21 subject group. Accordingly, for purpose of this sample, three broad subjects groups were considered—Arts, Science and Commerce. The table below shows the response ratios for 1962 graduates for these broad classification.

Subject Group	1962 Graduates		Response Ratios		
	1	2	Sample Size	Replies Received	Response Ratio (%)
Arts . . . . .		224		51	23
Science . . . . .		132		22	17
Commerce . . . . .		84		26	31
	TOTAL	440		99	23

Table below gives an idea of the current state of employment of 1962 graduates.

Subject Group	1962 Graduates		Unemployment Ratios				
	Replies Received	Number Employed	Number Unemployed	Married Females	Unemployed Total	Percentage Accounted by Married Females	
1	2	3	4	5	6		7
Arts . . . . .	51	39	12	10	24		20
Science . . . . .	22	20	2	2	9		9
Commerce . . . . .	26	24	2	..	8		..
TOTAL . . . . .	99	83	16	12	16		12

The persons unemployed did not report any work-income from part-time jobs or private tuitions.

Table below depicts the employment pattern of the 1962 graduates :

*1962 Graduates : Nature of jobs held currently by the full-time employed*

Subject Group	Adminis-	Clerical	Profes-	Teach-	Research	N.A.	Total
	trative of which (Banks)	of which (Banks)	sional and Technical	ing			
1	2	3	4	5	6	7	8
Arts . . .	5(0)	5(2)	..	28	..	1	39
Science . . .	..(0)	..(0)	4	14	2	..	20
Commerce . . .	6(2)	10 8	.5	3	..	..	24
<b>TOTAL</b> . . .	<b>11(2)</b>	<b>15(10)</b>	<b>9</b>	<b>45</b>	<b>2</b>	<b>1</b>	<b>83</b>

The corresponding salary distribution of 1962 Graduates currently employed on a full-time basis is given below :

*Salary distribution of the employed 1962 graduates (gross salaries)*

Subject Group	Salary Classes							Total
	Below Rs. 300	Rs. 300- 499	Rs. 500- 699	Rs.700- 899	Rs.900 and Over	Not Avail- able		
1	2	3	4	5	6	7	8	
Arts . . .	2	22	6	3	2 (a)	4	39	
Science . . .	..	9	4	2	3 (b)	2	20	
Commerce . . .	3	6	8	3	4	..	24	
<b>TOTAL</b> . . .	<b>5</b>	<b>37</b>	<b>18</b>	<b>8</b>	<b>9</b>	<b>6</b>	<b>83</b>	

(a) One of these two persons is working abroad.

(b) These three persons are all engaged in teaching or research abroad and are likely to fall in this class, though in two cases their salaries have not been reported.

The employed persons were grouped in terms of their academic and other qualifications in order to investigate how far post-graduates were better off than graduates who dropped off their post-graduate studies and failed to acquire masters' degrees. There were 9 such cases of drop outs among 1962 graduates who enrolled at the Calcutta University for prosecuting their post-graduate studies. It was observed that the drop-outs (those who did not complete their masters' degree) did much better than post-graduates including those with special qualifications, who are working in India. So

far as this sample is concerned, the cases of drop-outs reveal that there is no significant salary benefit arising from post-graduate qualifications and delayed entry into the labour market.

While the minimum salary for science graduates is somewhat higher compared with graduates of the Arts and the Commerce groups, their maximum salary earned (in India) is relatively low and the range of their salaries is also narrow. Science graduates apparently had less opportunities in competing for jobs with higher pay most of which lie outside the teaching profession. This may in part explain the "brain drain" which involves science graduates particularly.

Employment Exchanges played a minor role as a job-contacting agency for this group of graduates. Newspaper advertisements and personal contacts played the more important roles—the last being unimportant for science graduates.

Table below gives a broad idea of job mobility among those of the 1962 graduates who are currently employed.

*1962 Graduates : Job mobility*

Subject Group	1	Number currently employed who have held						Total
		1 job	2 jobs	3 jobs	More than 3 jobs	Not Available	6	
Arts	.	20	11	6	1	1	39	
Science	.	5	9	4	0	2	20	
Commerce	.	8	9	3	2	2	24	
<b>TOTAL</b>	.	<b>33</b>	<b>29</b>	<b>13</b>	<b>3</b>	<b>5</b>	<b>83</b>	

At least 40% of those currently employed continued with their first full-time job; about 19% have held three jobs or more since they entered the labour market. It was not possible to ascertain in detail how far mobility was voluntary, leading to salary increases or increased job-satisfaction, (or enforced by terminations of jobs held) or how far mobility was inter-occupational or intra-occupational. Sufficient information of these things were not available to be put into a neat tabular form.

For those currently in employment waiting periods before getting into the first full-time job are given in the table below. The waiting periods were calculated with reference to approximate dates of passing their relevant examinations.

*Distribution of 1962 graduates in terms of waiting periods before first full-time job*

Subject Group	Persons with Waiting Periods Ranging between				Total
	0—6 Months	6 months to 1 Year	Over 1 Year	Not Available	
Arts . .	26	4	4	5	39
Science . .	14	4	2	..	20
Commerce . .	20	2	2	..	24
<b>TOTAL . .</b>	<b>60</b>	<b>10</b>	<b>8</b>	<b>5</b>	<b>83</b>

It is clear that (at least) 67% of the Arts graduates, 70% of the Science graduates and 83% of the Commerce graduates were able to get jobs within 6 months after their graduation (in case of drop-outs) or post-graduate degree.

In a sense the "waiting periods" estimated in the table above are under estimates. As can be expected, many in the Universities were there because they had no jobs—this being particularly true of Arts and Commerce graduates. Of the 24 Commerce graduates currently employed only five were looking for jobs after completion of post-graduate studies. Those looking for job *before* and *after* taking their B.Com. degree were five and 12 respectively. The same is broadly true of the Arts graduates. In the case of Science graduates, however, only 7 out of 20 were looking for jobs after taking their B.Sc. degrees, while 13 sought jobs only after completion of post-graduate studies.

#### **Underemployment of 1962 graduates :**

From the information collected, it appears that many of the post-graduates are "underemployed" in the sense that they are working in jobs which require lower (sometimes much lower) academic qualifications. Summarising the information, it is seen that of the 39 persons employed in Arts Group, four graduates, five post-graduates and two post-graduates with special qualifications are currently in jobs which demand these respective qualifications; there is, therefore, no underemployment in so far these 11 persons are concerned. All the remaining members of the Arts group (excluding 2 n.a. cases) suffer from varying degree of underemployment. For Arts as well as for other groups, potential underemployment in this sense tends to increase as candidates acquire more qualifications, though it may well be true that superior academic qualifications increase possibilities of getting a job.

Of the 560 questionnaires sent out to the 1967 graduates, response was in the first instance received from only 213 of them representing an over-all response ratio of about 38%. Research assistants were then sent out to follow up as many non-respondents as possible, concentrating on the subject groups in which responses were particularly low and taking atleast five non-respondents from each subject group. On the basis of this broad rule, a sufficient number of non-respondents were chosen at random from each subject group, according to its weight in the total sample. The list thus prepared was followed up by the research assistants. There has been some non-response from this list also

because some of the persons had left their places of address and their present whereabouts were unknown. In all, 118 cases, belonging to different subject groups were effectively followed up. In the majority of such cases not the persons concerned but their relatives could be contacted and some information was collected from them regarding the employment status of the initial non-respondents. (Detailed information as per questionnaire was not available in many cases). The proportion of unemployment found for each subject group in the effective follow up list was then blown-up to cover all the initial non-respondents of the respective subject groups. A weighted percentage of unemployment was then calculated for each subject groups as a whole. The final results are shown below:

*1967 Graduates : Estimated unemployment for different subject groups*

Subject Groups	Weighted Percentage of Unemployment
1. Ancient Indian History & Culture, etc.	88
2. Languages	56
3. Sanskrit	71
4. Economics	35
5. Education	25
6. English	51
7. Political Science	66
8. Philosophy	84
9. History	70
10. Bengali	85
<b>TOTAL (Arts)</b>	<b>68</b>
11. Agriculture	61
12. Botany, etc.	38
13. Geography & Geology	17
14. Statistics & Applied Mathematics	50
15. Pure Mathematics	42
16. Pure Chemistry	27
17. Pure Physics	22
18. Applied Physics	40
19. Applied Chemistry	..
<b>TOTAL (Science)</b>	<b>36</b>
20. Commerce (day)	25
21. Commerce (evening)	22
<b>TOTAL (Commerce)</b>	<b>23</b>

*Part-time earnings of 1967 unemployed graduates*

Monthly Earnings from Tuitions, etc.	Number Engaged in Tuition, etc.
Rs. 10—39	4
40—69	18
70—99	9
100—129	3
130—159	6
160—189	4
190—219	1
Not available	5
<b>TOTAL</b>	<b>50</b>

About 50% of those engaged in private tuitions are earning less than Rs. 70 per month. About 31% are earning between Rs. 100 and Rs. 200 per month. The majority teach students of the high school level—relatively fewer teach college students.

In seeking jobs, the unemployed depend mainly on newspaper advertisements. Relatively few depend on the employment exchanges.

*1967 Graduates : Distribution of unemployed persons in different family income groups*

Father's/guardian's monthly income	Total Number Unemployed	Number of Married Females Unemployed
Below Rs. 200	21	1
Rs. 200—399	35	4
400—599	23	4
600—799	10	4
800—999	9	7
1,000—1,499	6	3
1,500 and above	9	3
Not available	60	23
<b>TOTAL</b>	<b>173</b>	<b>49</b>

The data confirm our findings regarding underemployment among 1962 graduates. For the Arts group, four out of six honours graduates and only 12 out of 45 post-graduates were not suffering from underemployment as defined for the study. The rest (n.a. cases excluded) are suffering from varying degrees of underemployment. The relative proportion of underemployment is much less for the science group. The single honours graduate in this group is not underemployed. Of the 62 science post-graduates at least 37 are not underemployed. The remaining science post-graduates (excluding six n.a. cases) are working in jobs which do **not** require a post-graduate degree. These are, therefore, underemployed. Commerce graduates suffer much more than other graduates from underemployment. Proportion of post-graduates underemployed is much higher for this group and so is the 'degree' of underemployment in many cases. Of the 9 pass and honours graduates of this group eight are working, in jobs which require a Pass degree as minimum qualifications; of the 34 post-graduates only two are working in jobs which demand M.Com. as minimum qualifications. Underemployment among post-graduates is thus particularly serious in the Commerce group.

#### *IV Report of the Study on Impact of Minor Irrigation and Rural Electrification on Employment, etc. by the Administrative Staff College of India, Hyderabad.*

##### **Objective :**



The main purpose of this study was to examine the effects of electrification and minor irrigation on rural unemployment in the regions concerned. The study also proposed to throw light on the changes which had taken place as a result of rural electrification and minor irrigation in the cropping pattern of the regions concerned, in the setting up of new agro-based industries, in technological developments in agriculture itself, as also, the shift in the pattern of employment from on-farm to off-farm operations. Thus the objective of the study was **not** so much the estimation of the direct employment generated through the construction of minor irrigation works such as minor tanks, wells, etc. or the installation of electrical equipment in rural areas. It was intended to quantify the changes of various types arising out of minor irrigation and rural electrification and to measure them through the change in cropping pattern, double cropping area, consumption habits of the people and consequently on employment. This type of information could not be readily available from routine statistics.

##### **Design of the study :**

Employment and levels of living in rural areas are sensitive to are influenced by a large number of factors, like land per person, total irrigation facilities, cropping pattern, availability of raw materials for various other activities, mechanical equipment, savings potential and propensity to save, availability of credit various types of Government outlays, proximity to urban centres, education and skills, etc. Minor irrigation and electrification are two of the principal factors contributing to the development of any area. The basic issue of design, therefore, was the problem as to how to isolate the effects of these two from those of other factors. An attempt was, therefore, made to base the study on a selection of villages of households which were homogeneous in respect of other variables but differed in respect of the presence or level of provision of minor irrigation and/or electrification. In actual practice, however, this ideal approach had to be sacrificed for something more practicable in the field. Another important point which needs to be noted is that the pur-

pose of the study was not to obtain reliable estimates either for the country as a whole or for a particular state or even for a district or a block. Therefore, the generalisation of these results in quantitative terms is subject to limitations.

Taking into consideration the crop patterns in different regions of the country and the availability of time and resources in three states, namely, Andhra Pradesh, Uttar Pradesh and West Bengal—each representing a distinct region—were selected. For further selection of districts within each of these states consideration was given to the experience of these districts where minor irrigation and rural electrification were made available in large doses in the recent past. Therefore, one district from each of these states was selected where absolute change during 1965-66 to 1970-71 in minor irrigation in acres and in the number of electric service connections were the largest. To minimise the role of other factors and to eliminate short-term changes, three years' averages in acreage in irrigation and electric service connections were taken. The districts selected were Chittur in Andhra Pradesh, Meerut in Uttar Pradesh and 24-Parganas in West Bengal. The next stage of sampling was at the level of the taluk and out of each of the selected districts, a taluk was selected on similar criteria. This procedure led to the selection of Puttur taluk from Chittur district of Andhra Pradesh, Hapur tehsil from Meerut district of Uttar Pradesh and Deganga taluk from 24-Parganas district of West Bengal. The next stage of sample selection involved the selection of villages. In order to ensure the homogeneity of selected villages in other important respects, the following items were considered.

- (i) Standards of land acreage per household.
- (ii) Occupational pattern as between cultivators and non-cultivators.
- (iii) Soil conditions.
- (iv) Mechanisation in agriculture, i.e., the type of agricultural implements used.
- (v) Irrigation by sources other than minor irrigation.

The selected villages were sub-divided into five categories :

- (i) Having the least addition of minor irrigation and electrification (L)
- (ii) Having addition in minor irrigation only (I)
- (iii) Having addition in electrification only (E)
- (iv) Having addition in minor irrigation as well as electrification (I.E.)

From each of the above four groups of villages selection was made in such a way that the total sample came to four to six villages. As a result of this selection, the total sample for the study consisted of four villages from Andhra Pradesh, six villages from Uttar Pradesh and six villages from West Bengal. At the village level, the data collected included those of population, land utilisation, irrigation, land values, cropping pattern and yields, electrification, credit, wages, agricultural machinery, village industries, etc. In order to identify the effect of the two infrastructural facilities more clearly, within the villages households were selected after stratifying the households into two distinct categories of cultivator households and non-cultivator households; cultivator households were divided into three distinct categories of owner cultivators, tenant cultivators and mixed farmers, each further classified on the basis of size of the holding and irrigation type. The size of the holdings taken for this purpose included 0 to 5 acres, 5 to 10 acres and more than 10 acres. The type of irrigation facility considered for this purpose included canal, minor irrigation, etc. The non-cultivator households were sub-classified as agricultural labourers' households, other labourers' households and service households.

As there was very little prior information to go by for determining the sample size, the percentages were based on intelligent guess. The percentages of households selected from each category varied with the size of the category in the village. The smaller the size of the category, the larger was the percentage of households included in the sample. The percentage varied from 2% to 50% mainly to ensure, at least five households of each category.

### Main findings :

#### 1. Land utilisation :

There is a close relationship between irrigation facilities and area cultivated more than once. In the villages having substantial irrigation facilities as reflected in the acreage under irrigation, the double cropped areas is also more than it is in the villages having no or minimum irrigation facilities. Electrification does not have any significant impact on the acreage of double cropped area unless electrification is utilized for providing additional irrigation facilities, such as, through tube wells. This fact is evident from the data in the table below :

TABLE

*Percentage of irrigated area and double cropped area to gross cultivated area*

Region	Andra Pradesh		Uttar Pradesh		West Bengal	
	Irrigated Area	Area Cultivated more than once	Irrigated Area	Double Cropped Area	Irrigated Area	Double Cropped Area
IE	54.00	27.00	98.08	56.07	24.05	48.74
IE (1)	..	..	97.33	76.59	80.40	75.96
IE (2)	..	..	97.38	58.09	58.18	33.33
I	63.00	58.00	42.57	52.11	71.66	83.33
E	37.00	21.00	97.66	64.57	49.27	75.70
L	38.00	8.00	84.13	43.45	84.21	62.50

From the household schedules, too, it is found that in Andhra Pradesh among the cultivators, irrespective of the size of the land holding, the gross cultivated area was greater where both irrigation and electricity were available. The small farmers, because of electrification, had 50% more gross cultivated area followed by 25% in the case of large farmers, but the percentage of double cropped area as a percentage of gross area was generally larger among the small farmers with EI than among those farmers having electrification alone. The percentage of double cropped area was not the highest either for small cultivators, or large cultivators. Middle farmers appeared to have the highest percentage of double cropped area. Cultivators in the village not having irrigation and electrification facilities did not have any double cropping area in their farms.

In Uttar Pradesh electricity led to more irrigation and in all the surveyed villages the gross cultivated area for all classes of cultivators was higher where

they had electric supply in addition to irrigation facilities. The percentage of double cropped area was highest in the case of small farmers and lowest for big farmers because of the tube well irrigation in this State.

The data pertaining to West Bengal, however, do not present a clear picture. The relation between double cropped area and the irrigation was not strong. There were cases where substantial double cropping was noticed with limited facilities. This appears to be due to rainfall, soil and climatic factors. The small farmers have benefitted from irrigation and put more area under a second crop.

## 2. Cropping pattern :

In Andhra Pradesh, the principal crops of the sample villages are Paddy, Groundnut, Rabi and Bajra. The presence of irrigation and electrification led to a larger proportion of the cultivated area being under paddy. The yield per acre of high yielding variety was as high as 30 quintals per acre in IE village whereas it was only 22.23 quintals in L villages. Bajra and Rabi showed similar pattern. However, in L villages groundnut yield was higher. An interesting feature noticed was diversification among the large farmers.

In Uttar Pradesh villages, paddy, sugarcane and maize are the principal kharif crops and wheat the major rabi crop. Generally, irrigation and electrification facilities appear to have caused a change in the cropping pattern in favour of sugarcane and paddy against wheat. The village with least of these facilities had high proportion of its acreage under wheat and less under the others of the above-said crops. The yield of sugarcane in IE village was higher around 200 quintals as compared to 150 quintals in the L village. In almost all the villages of U.P. sugarcane cultivation was less on small farms. They grew wheat on more and more area with irrigation, HYV variety of wheat and sugarcane was popular. Electrification had made some impact on the yield of maize alone. In West Bengal, paddy, jute and wheat are the main crops of Kharif, summer and rabi seasons. The data do not evince any significant effect of the irrigation or electrification on the cropping pattern. However, the yield rates differ significantly. HYV paddy yield in IE village was 15 to 20 quintals per acre and it went down in the villages with lesser of these facilities. Jute and wheat also showed similar trend. The yield rate of jute in IE villages was 10 quintals per acre whereas it was only seven quintals in L villages. The yield rate of wheat also got reduced from 12 in IE village to five quintals in L village. Small cultivators in West Bengal have taken to cultivation of wheat. Jute is being sown more and more in the villages where electrification is found along with irrigation. The relevant data are given in the table below :

TABLE  
*Cropping pattern in the selected villages*

State	Village	Percentage of Total Area	
		Paddy	Groundnut
Andhra Pradesh	1. IE	36.2	35.5
	2. I	26.4	50.1
	3. E	34.7	53.0
	4. L	22.0	59.0

State	Village	Percentage of Total Area			
		Paddy	Maize	Sugarcane	Wheat
Uttar Pradesh	1. IE	3·8	13·3	22·1	38·9
	2. IE (1)	3·8	15·2	23·5	35·5
	3. IE (2)	..	13·8	20·4	36·9
	4. I	..	14·5	21·6	44·1
	5. E	3·5	12·6	25·4	34·0
	6. L	0·1	6·6	14·0	52·7

		Paddy	Jute	Wheat
West Bengal	1. IE	38·60	35·30	7·10
	2. IE (1)	38·00	14·00	10·00
	3. IE (2)	63·80	10·91	16·36
	4. I	37·90	4·60	7·60
	5. E	41·10	9·10	6·90
	6. L	47·10	10·80	15·71

### 3. Agricultural equipment and livestock :

In Andhra Pradesh IE village had most of the equipment and L villages least. However, their number was very small and insignificant. Mostly traditional tools were being used. Livestock possession per household was substantial in the villages with least facilities of electrification and irrigation in comparison to the villages of the other categories. Within the villages the number of cattle increased with the size of the holding.

In the selected villages of Uttar Pradesh there were more tractors and threshers and their number per households were related to the size of holdings. The households having electrification and irrigation facilities had more of them. However, the data do not reveal any pattern. The possession of livestock too does not appear to have any relationship with irrigation or electrification.

In West Bengal there were no tractors. The other equipment like threshers and sprayers were possessed by households having larger holdings. Possession of livestock, too, had no connection with irrigation or electrification.

### 4. Use of fertilizers, pesticides and HYV seeds :

The tables below give the number and percentage of cultivators using these inputs.

TABLE

*Distribution of cultivators using fertilizers, pesticides, and seeds of high yielding varieties*

Village		No. of Cultivators in the Sample	Percentage of Cultivators/Using		
			High Yielding Variety	Fertilizer	Pesticides
<b>Andhra Pradesh</b>					
1.	EI	194	62·89	74·23	73·20
2.	I	356	7·02	98·31	84·55
3.	E	297	35·35	36·03	36·03
4.	L	299	21·07	52·51	16·05
<b>Uttar Pradesh</b>					
1.	EI	188	85·11	85·11	35·64
2.	EI (1)	144	95·83	95·83	63·89
3.	EI (2)	124	100·00	100·00	100·00
4.	I	122	100·00	100·00	100·00
5.	E	180	97·22	96·67	68·33
6.	L	108	76·85	75·00	22·22
<b>West Bengal</b>					
1.	EI	187	29·95	57·22	43·32
2.	EI (1)	39	100·00	100·00	100·00
3.	EI (2)	146	41·10	43·84	36·99
4.	I	69	36·23	40·58	39·13
5.	E	33	10·84	13·25	9·64
6.	L	57	64·91	64·91	64·91

Both in Andhra Pradesh and Uttar Pradesh, on an average, the percentage of cultivators using those facilities was found to be highest in the electrified villages with irrigation facilities and the lowest in the villages where irrigation and electrification were the minimum. The data in respect of West Bengal, however do not present any clear picture.

5. *Employment :*

The table below gives the mandays worked by workers in a family during an year in the different categories of the sample villages.

TABLE

*Distribution of the family labour mandays by the type of employment*

Village	Workers per Household	Mandays Worked per Household during Year	Percentage of Mandays Worked in		
			Own Farm	Other's Farm	Services*
<b>Andhra Pradesh</b>					
IE	1.79	455.80	41.87	22.89	33.73
I	1.90	473.10	42.30	28.90	28.80
E	2.41	570.00	37.70	25.34	26.96
L	2.34	346.30	21.25	31.25	47.25
<b>Uttar Pradesh</b>					
IE	1.67	472.32	58.40	9.00	7.50
IE (1)	1.58	674.00	72.52	3.30	23.75
IE (2)	2.29	629.63	76.62	4.40	16.10
I	1.57	726.80	75.50	9.70	14.80
E	1.71	651.00	76.44	1.00	20.60
L	1.56	505.80	43.00	4.00	41.90
<b>West Bengal</b>					
IE	1.33	325.00	35.00	14.10	46.00
IE (1)	1.18	368.00	36.30	20.89	32.57
IE (2)	1.32	423.00	38.70	11.23	37.67
I	1.23	486.27	50.70	8.00	24.22
E	1.25	442.00	40.00	13.00	24.00
L	1.26	443.00	46.30	21.40	32.30

NOTE :—\*Services include non-agricultural services like those of blacksmith, Cobblers, etc. The remaining percentage of Mandays are distributed to Aggro and Household Industries. IE indicates a village where changes in minor irrigation and electrification were moderate.

### **Andhra Pradesh :**

It will be observed from the table above that family employment in I villages was the highest being 473.10 mandays in a year and lowest in L villages being 346.30 mandays. Data in respect of Andhra Pradesh villages indicate that irrigation adds to the number of days worked per able-bodied person in each class of farmers. Among the small farmers it added 10 to 48 days work per worker in a year. Electrification had significant impact on the working days of small farmers, but on medium and large farmers, it was not very significant. In all the villages the mandays worked per person were higher in case of the middle farmers compared with the figures in respect of large and small farmers. The mandays worked in one's own farm was highest in the middle ranges and lowest in the case of small farmers who spent most of their spare time in working one other's farm. In case of agricultural labourers and artisan also the impact of irrigation and electrification was evident. The working days of an agricultural labour in IE villages were 180 while in L village they were only 137. In case of artisan, the working days were highest being 315 in I village, near about 241 days in IE village, 243 days in E village, but only 116 days in L village. The variation was not so significant in case of labour rendering services.

It is notice that of the total labour requirements hired labour contribution increases with the size of the farm. Generally with an increase in the irrigation and electrification, total farm employment increases in a substantial way. The share of hired labour goes up with electrification in small size farms too.

### **Uttar Pradesh :**

Family employment was found to be highest in I village being 726.80 mandays in a year. It was lowest being 472.32 in a year in the IE village. It is not possible to ascribe this difference to any specific factor. Electrification has not resulted into any significant change in the mandays worked per person in any of the classes of workers. Similarly, mandays worked by cultivators of holdings of varying sizes do not materially change. However, overall employment appears to be higher in IE village and I and E villages compared to the villages where these facilities were not available on the same scale. The percentage of time spent on own farm was higher in E and I villages than in the villages of the other two classes. Electrification or irrigation does not appear to be making any discernible difference in the working days of agricultural labour and non-agricultural workers. The total employment in larger farms was higher than among small farms and the total mandays worked in IE farms was higher than that in those farm having irrigation alone. Percentage share of hired labour increased with the size of the farm as well as with electrification.

### **West Bengal :**

In West Bengal, the mandays worked per family in the different categories of sample villages do not indicate any trend. The effect of irrigation or electrification is not evident. The number of days worked per family was lowest in case of IE villages and it was highest in the L villages.

The data on the mandays worked by different class of workers also do not provide any clear picture.

The study, however, bring out that in almost all cases irrigation provided extra employment.

#### *6. Multiple regression results :*

The study has also attempted to have a quantitative estimate of the relationship between the inputs especially minor irrigation and electrification and their influence on employment. The analysis reveals that by increasing an acre of land under their minor irrigation it increases employment for one person by about two months. Increased credit facilities also increase employment; for every additional credit of 9 rupees employment increases by one manday. Electrification, area under minor irrigation and credit are closely related. In Andhra villages irrigation appeared to be the limiting factor, whereas in U.P. and West Bengal the availability of electricity influences the area under minor irrigation.

**Andhra Pradesh :** In Andhra Pradesh, primary determinants of employment were area under minor irrigation and to a smaller extent credit. In larger farm sizes employment increased as a result of increased water supply and more intensive cultivation. However, the relation of employment with electrification was very weak.

Extent of mechanization in Andhra Pradesh was found to be very limited. Hence no conclusive evidence was available about its effect on employment.

Availability of credit has a significant influence on employment. Availability of credit is, however, primarily affected by the gross irrigated areas, cropped area and mechanization.

Increase in minor irrigation facilities results in increased family employment as well as employment of hired labour, more so in case of the latter.

**Uttar Pradesh :** The primary determinants of increased in employment in U.P. villages are area under minor irrigation and the availability of credit. The region being more mechanized, the employment potential of irrigated land is only 35 mandays per acre. Electrification increases minor irrigation facilities and intensive cultivation and consequently generates more employment.

The impact of mechanisation of total employment is negative. However, it has significant and positive influence on family employment.

Increase in credit increases the purchase of electric pump sets and influences gross cropped area significantly.

**West Bengal :** Minor irrigation has a significant impact on employment as it promotes intensive cultivation. The extent of mechanisation being small, no conclusive evidence about its impact on employment was available.

The study concludes that area under minor irrigation has a significant impact on employment. It increases gross cropped area, improves cropping pattern and brings better resources to the farmers resulting into increase in the volume of employment.

Electrification has only negligible impact on employment. It is not an altogether independent variable. Credit has a positive but only small extent of influence on employment. Increased credit facilities do increase employment.

#### *7. Occupational pattern :*

The percentage distribution of working population by occupation in the selected villages of the three States is given on next page.

TABLE

*Percentage distribution of households by occupation*

Region	Andhra Pradesh			Uttar Pradesh			West Bengal		
	Culti-vators	Ag. Labour	Others	Culti-vators	Ag. Labour	Others	Culti-vators	Agr. labour	Others
IE	46.2	43.8	10.0	43.5	14.4	42.1	32.92	49.64	17.44
IE (1)	..	..	..	41.6	26.9	31.5	18.22	29.83	57.95
IE (2)	..	..	..	42.5	31.0	26.5	21.28	23.32	55.40
I	53.9	34.8	11.4	44.0	39.0	17.0	34.67	45.72	19.59
E	54.1	54.1	8.6	51.1	21.1	27.8	36.72	37.61	25.67
L	49.6	33.2	17.2	44.6	16.5	38.9	48.71	47.86	3.43

The data do not reveal any significant effect of electrification and irrigation on the occupational distribution.

#### 8. Wage rates :

Data on the wage rates indicate that electrification as well as irrigation do not have any relationship with the wage rates.

#### 9. Living standards :

The study included enquiry about the use of durable goods and the eating habits. It was found that households having higher size of holdings, irrigated lands and electrification had more of durable goods than the rest. Eating habits, too revealed the same pattern. In the villages of Uttar Pradesh and West Bengal, the number of these goods were significantly higher among service and artisan households as compared with intermediate size cultivators.

"An appraisal of schemes of rural employment" undertaken by the Administrative Staff College of India, Hyderabad.

#### Objectives :

The main objective of the study was to make a critical appraisal of such rural employment schemes as Small Farmers Development Agency (SFDA), Marginal Farmers and Agricultural Labourers (MFAL), Rural Works Programmes for Chronically Drought Affected Areas (DPAP) and Crash Schemes for Rural Employment (CSRE). It *inter alia* involved the examination and evaluation of the following aspects :

- (i) Whether the schemes are really employment oriented and whether they would be self generating employment in the long term;
- (ii) whether the schemes as conceived and formulated and to be implemented separately would be more efficient in terms of generating extra employment than the alternative of an integrated programme for selected districts; and
- (iii) the likely effects on the wage rate and the structure of unemployment.

### Scope and coverage :

Since most of the schemes were put into operation only recently, it was not considered appropriate to make an objective evaluation of these schemes based on field data. The other alternative for assessing these schemes and their impact in rural employment was to depend on the views of the officials, the non-officials and the potential and actual beneficiaries. The objectives of evaluation of the schemes included :

- (i) whether these schemes were employment oriented and would ensure steady employment in the long run;
- (ii) whether these schemes were conceived within a larger framework of development of the selected district; and
- (iii) whether they contributed to the raising of living standards of the rural population.

The study was located in Andhra Pradesh, where CSRE was being implemented in all the nine districts DPAP in five districts, SFDA in three districts and MFAL in two districts. In selecting the areas for the study the preponderance of these schemes, the expenditure on these schemes and the co-efficient of variation of rainfall were taken into consideration. The selected areas included the Cuddapah taluq and parts of Nalgonda and Ramannapat taluqs of Cuddapah and Nalgonda districts respectively. Six villages in each of the selected taluqs, where the number of activities under the small and marginal farmers programmes and the number of beneficiaries were largest were selected.

### Sampling design :

Within each of the selected villages the study was restricted to only those households which were identified by the official agencies to be eligible for benefits under any of the four schemes. The number of identified and eligible households under SFDA and MFAL selected for detailed study in the two districts was as follows :

Villages	Identified Households	Households Benefitted	Sample Selected from	
			Benefitted Households*	Non Benefitted Households*
Nalgonda villages . .	1094	327	110 (33.6)*	35 (4.5)
Cuddapah villages . .	907	248	83 (33.5)	21 (3.2)

\*Figures within brackets indicate the percentages.

The details of the rural employment schemes, including their coverage financial outlay and physical achievements were obtained from official records at the district level; while data on the characteristics of the population, land utilisation, irrigation, cropping pattern, agricultural equipment, availability of infrastructural facilities such as co-operative societies, land mortgage bank etc., working of the credit institutions, and the scheme-wise number of beneficiaries under different

activities and also works undertaken in DPAP, CSRE were obtained by means of a schedule at the village level.

The 1971 Census data regarding occupation distribution of the households in the selected villages as well as the information collected during the course of the study brought out the following points :—

- (i) The proportions of cultivators and agricultural labourers in the selected villages were less than the corresponding percentages for state. The selected villages in Nalgonda district had a smaller proportion of agricultural labourers (33.1 per cent) in the total labour-force as compared to the selected villages in Cuddapah district (51.7 per cent). The corresponding proportions in the case of cultivators were 34.2 and 26.8 per cent respectively;
- (ii) The percentage of identified small and marginal farmer households varied from 18 to 87 in the selected villages. However, the officially identified households of small and marginal farmers were 50 as against 228 observed on actual enumeration;
- (iii) The percentage of net cultivated area in the selected villages of Nalgonda taluq (66.9) was higher than the state average (41.6) while in the case of Cuddapah taluq (15.0) it was significantly below the state average. Similarly, the wet land as a percentage of cultivated area was significantly higher in Nalgonda taluq (8.5) as compared to Cuddapah taluq (0.9). This was mainly due to the fact that the selected villages in the Cuddapah taluq had an extensive forest area i.e., 61.2% of the total area under them. Thus, the percentage of cultivators, land utilisation and irrigated cropped areas were higher in the villages of Nalgonda taluq as compared to villages in Cuddapah taluq;
- (iv) The prevalence of infrastructural facilities were more or less uniform in Cuddapah villages while in Nalgonda villages they varied widely.

#### Main findings :

##### 1. Plans and performance :

SFDA—a pre-requisite for the formulation and implementation of the various development schemes for small farmers was set up in Nov., 1970 in Nalgonda and in February, 1971 in Cuddapah district. The agency in Nalgonda district had an annual budget of Rs. 50 lakhs for both the schemes i.e. SFDA and MFAL to cover 50 thousand small farmers and 20 thousand marginal farmers and agricultural labourers by the end of the last (fourth) year while in Cuddapah district, the SFDA had an annual budget of Rs. 30 lakhs to cover 50 thousand small farmers during the same period.

The achievements in regard to minor irrigation activities, namely, construction of new wells and repairs of old wells, installation of electric or oil pump-sets, which accounted for the largest allocation, was much less than the corresponding targets, as given below :

Item	Target	Achievement (upto November, 1972)	Percentage Col. 3 to Col. 2
New wells . . .	3,600	483	13.4
Repair to old wells . . .	4,000	435	10.9
Pump sets . . .	10,600	342	3.23

Judging the progress of the schemes under SFDA and MFAL in the light of the proposed financial outlay and the actual expenditure incurred till the end of Nov., 1972 which incidently cover nearly 2/3rd of the period for which these two schemes were originally formulated, it appeared that the financial outlay proposed under the two schemes were far inadequate in relation to the actual requirements. Like-wise the actual achievement under crop loans, land development, dairy, other animal husbandry schemes, rural artisan were also not very impressive.

#### Rural works programmes in drought prone areas (Cuddapah District) :

In pursuance of the broad guidelines, issued by the Ministry of Food and Agriculture, under the schemes, the State Government formulated a four year Master Plan ending with March, 1974 for the Cuddapah district. The total outlay of Rs. 331 lakhs which was subsequently reduced to Rs. 216 lakhs was envisaged for the four year period. During the first three years ending 1972-73, about Rs. 212 lakhs were released and the actual expenditure upto September, 1972 was 120 lakhs or 61 per cent. The expenditure incurred on different types of activities was not uniform; it varied from 30 per cent in the case of minor irrigation (PWD) to 78 per cent in the case of roads (P.R.). The total employment generated over a period of two and a half years was about 43 lakh mandays i.e. roughly 17 lakh mandays per year or in other words the employment was offered to little less than six thousand workers for three hundred days in a year.

#### Crash schemes for rural employment :

Following the instructions issued by the Government, the Panchyat Raj Institutions which were entrusted with the responsibility of selecting and implementing the schemes made a provision of Rs. 30 lakhs each year for the three years from 1971-72 to 1973-74. 64 per cent of the proposed allocation was earmarked for road construction, 11 per cent each for Community Irrigation Wells and Housing, 10 per cent for constructing of class rooms for primary schools, etc. In Nalgonda district alone, 41 rural works proposed, included 34 minor irrigation works and two hundred community irrigation wells, 75 primary schools, buildings, 34 residential houses and a godown. In the case of Cuddapah, 35 works at the total cost of Rs. 26 lakhs were sanctioned and of this eleven works at the cost of Rs. 19 lakhs were completed till the end of August, 1972. During the first year the expenditure incurred in Nalgonda district was only a fraction of the total amount released whereas in Cuddapah almost all the amount earmarked for rural works programme was spent. The physical achievements did not correspond to the financial outlay. In Cuddapah not even a single minor irrigation work was completed and even in Nalgonda the number of tanks completed were very small, and no new well was taken up under the programme. However, in road construction more than 60 per cent of the targets were achieved in both the districts. The details of expenditure and achievements are as follows :

#### *Release and expenditure details upto March, 1972*

(Rs. in lakhs)

Activity	Nalgonda District		Cuddapah District	
	Amounts released	Actual expenditure	Amounts released	Actual expenditure
Minor Irrigation works . . .	2.95	0.74	1.05	2.02
Road works . . .	13.53	5.54	14.65	13.45
Total . . .	16.48	6.28	15.70	15.47

*Physical targets and achievements upto March, 1973*

Item	Nalgonda District		Cuddapah District	
	Target	Achieve- ment	Target	Achieve- ment
1. Employment :				
(in lakh mandays)				
(a) M. I. works .	0.72	0.22	0.34	0.59
(b) Road works .	2.88	2.16	3.92	4.06
2. Length of Roads :				
(in Kms.)				
(a) Improvements .	101	60.5	255	116.7
(b) Formation .	..	13		
3. Minor Irrigation works :				
(in numbers)				
(a) Tanks . .	30	8	..	..
(b) Wells . .	52	..	220	..

2. *Impact of the schemes :*

The information collected from the selected households during the course of the study showed that in the case of SFDA in the selected villages of Nalgonda district the amount of credit extended per household ranged from Rs. 2,760 for well repairs and electric pumps to Rs. 389 for crop loans. Almost a similar pattern was observed in the case of MFAL, except that the highest credit extended to a household was Rs. 2,500 for electric motors and the smallest Rs. 274 for crop loans. The corresponding figures ranged from Rs. 3770 for well sinking to Rs. 750 for Bullocks in the case of Cuddapah villages. Among the inputs, fertilizers were the only components which were supplied to the farmers in substantial quantities along with crop loans. Mostly the crop loans were supplied by the co-operatives, credit for well sinking and pumpsets by Land Mortgage Bank and dairy activities by commercial banks.

Generally, the households which received loan for one of the activities was not considered for any credit for other related agricultural activities. Out of the total 438 farmers identified under SFDA in Nalgonda villages, only 39 per cent derived benefit in the form of credit from various institutions. Of these 53 per cent obtained loans from Land Mortgage Banks, 8 per cent from commercial banks and 39 per cent from co-operative institutions. Similarly, under marginal farmers programme, 656 were identified as marginal farmers. Of these, 23 per cent were provided with credit facilities of one kind or the other; the commercial banks advanced loans to 55 per cent of the Land Mortgage Banks extended long-term and medium-term loans to 18 per cent of them. In Cuddapah District, of the 907 small and marginal farmers identified, only 27 per cent received institutional credit. Of these a large proportion, 80 per cent received credit facilities from Co-operatives. The Commercial Banks did not evince any interest in any of these programmes.

The amount lent by Land Mortgage Banks for small farmer households on an average was Rs. 2,378 in Cuddapah and Rs. 2,013 in Nalgonda. The corresponding amounts lent to marginal farmers were Rs. 1,500 and Rs. 1,504 respectively. The credit advanced by the co-operatives ranged from Rs. 100 to Rs. 457, for fodder or for other inputs. Here also, the marginal farmers received less than the small farmers and in Cuddapah District the average lending was higher than in Nalgonda.

The utilization of credit, on the whole, seemed to be satisfactory. Over 90 per cent of the credit extended to farmers by different financial institutions was put to productive use. The diversion of credits from the intended purposes was common in the case of crop loans; however a major part of the diverted funds was used for productive purposes such as purchase of bullocks etc., for non-productive purposes too the amount utilised from crop loans was substantial. In Nalgonda, however, a substantial amount intended for well repairs was used for consumption purposes.

As regards employment, the study revealed that the additional employment credit per household among the small farmer families which derived any benefit under the scheme was about 5 per cent (in Nalgonda) and 20 per cent (in Cuddapah). The additional employment per worker was, however, around 16 per cent in Nalgonda and 12 per cent in Cuddapah. In Nalgonda, the employment per worker among small farmer families which derived any benefit under the scheme varied from 192 mandays in the case of well sinking to 280 mandays in a year in the case of milch cattle. In the case of MFAL scheme the employment per worker was highest among the families which received crop loans or loans for milch cattle. In Cuddapah, employment per worker varied between 210 mandays in the case of small farmer families that could secure loans for purchase of bullock to 285 mandays in the case of those families which could borrow for the installation of electric motors.

The data collected on land utilisation, particularly those related to irrigated land showed that the beneficiaries as owners or cultivators generally had more irrigated Land than the non-beneficiaries under the scheme. This was true both for small and marginal farmers in Nalgonda district. The average size of the operational holdings, both irrigated and non-irrigated, for the small farmers in Nalgonda district was about 7.1 acres whereas the ownership holding was only 6.4 acres; the corresponding sizes in Cuddapah district were 6.2 and 6.0 acres respectively. In the case of marginal farmers in Nalgonda, the size of the operational holding including irrigated and non-irrigated areas was 3.0 acres while the ownership holding was 2.7 acres. Corresponding figures for Cuddapah district were 3.3 acres and 3.1 acres.

Similarly, the study showed that in respect of crop yield per acre; use of agricultural implements, rearing of livestock, consumption habits, etc. the households benefitted were better than those which did not receive any assistance under these programmes. The study also brought out that among the small and marginal farmers the benefit went to those families which already had a lead within this group.

#### Rural works programmes for chronically drought affected areas (DPAP) :

These programmes were in operation only in Cuddapah district and four out of the six villages selected, were covered. In some of the villages the works were completed and in others they were in operation. Most of the labourers employed on soil conservation programme, roads and minor irrigation works were from outside the selected villages.

### **Crash schemes for rural employment (CSRE) :**

These schemes were in operation in three of the selected villages of Nalgonda and two of the selected villages of Cuddapah district. The data collected on the basis of household study revealed that the average additional employment provided in each of the villages per worker and per household ranged between 57 man-days to 89 man-days in Nalgonda district while it was around 30 man-days in the villages of Cuddapah district. The additional employment provided per worker by these schemes constituted around 48 per cent in one and about 28 per cent in two villages of Nalgonda, and 6 to 8 per cent in the villages of Cuddapah district. Wages paid under the schemes were invariably higher than the average wage prevailing in the selected villages.

### *3. Qualitative impressions :*

On the basis of the opinion survey undertaken as a part of the study it was observed that most of the village elders were aware of the small and marginal farmers schemes to a greater extent than the CSRE and DPAP schemes. Similarly, with regard to the identification of the deserving families under the four schemes, the opinion of the elders was that quite a large number considered the present system of identification as satisfactory except in respect of labourers for SFDA and DPAP. However, there was a unanimity among the village elders regarding the undue delays in the identification of the schemes, their formulation, scrutiny, sanction of loans, flow of inputs and the functions of the schemes in general. The quality of the inputs supplied was either fair or good but the assistance and help rendered by the various extension officers were considered as very good. However, the village elders felt that the storage and marketing facilities in Nalgonda were very poor. The elders felt that the impact of rural employment schemes on various items of developments was fair.

Almost all the eligible small and marginal farmers were aware of the SFDA and MFAL programmes in both districts. This awareness, however, was much less in the case of families which were eligible for employment under CSRE and DPAP. Among small farmers and marginal farmers in the selected villages of Nalgonda district, over 61 per cent were aware that someone was going to identify the small farmers, marginal farmers and agricultural labourers and recommend them for various types of credits. About 38 per cent were also aware of the subsidy content under these programmes. In Cuddapah, the corresponding percentages were 40 and 60 respectively.

In Nalgonda district, 90 per cent of the people were contacted by the SFDA staff along with the block staff and village officials. The Sarpanch played a very minor role in this district. In Cuddapah, the block staff along with Patwari contacted more than 70 per cent of the families. On the whole it appeared that the agency staff together with block staff and Patwari did most of the work in getting in touch with the concerned families. The general feeling in Nalgonda was that credit for obtaining fertilizers, for sinking of wells and for procuring fodder was not inadequate whereas the position in Cuddapah district was the opposite. Most of the recipients of assistance under these schemes felt that the Agricultural extension officer, (co-operation), and agricultural demonstrators were not at all helpful to them. Twenty seven per cent of the respondents in Nalgonda district, and 36 per cent in Cuddapah district felt that village level workers were helpful. A great majority of farmers felt that both credit and other inputs were received after considerable delay. However, most of them were satisfied with the quality of inputs. A great majority of the respondents in Cuddapah as well as in Nalgonda did not say that they

were having any storage or marketing problems for their produce. No serious transport bottlenecks were mentioned by them. About 52 per cent of the identified and eligible households in Nalgonda and 62 per cent in Cuddapah felt that they were getting reasonable prices for their produce. However, a great part of their produce was being sold through the middlemen. The share of the co-operative societies in this respect was very small in both the districts.

A great majority of the farmers and agricultural labourers who derived benefits from these schemes considered the schemes highly useful. To a specific question to the identified households at the time of the survey whether they had derived any benefits, the response was not very favourable. However, a large majority felt that the impact of these schemes on farm output, cropping pattern, irrigated areas, etc. was negligible. Similarly, with regard to another specific query from agricultural labourers and other families whether crash schemes had resulted in any additional employment, higher wage rates and better consumption, a great majority of them felt that the effect of these schemes on wage rates and consumption habits was either fair or negligible. But so far as the impact of employment during the lean season was concerned, specially in Nalgonda district, a large proportion of the households felt that it was either fair or substantial.

#### *4. Appraisal :*

Under the Small Farmers Scheme, the coverage of 50 thousand farmers in each district was found to be reasonable. However, the coverage of marginal farmers was inadequate both in terms of the number of families and acreages. The outlay earmarked for additional employment under the two Employment Schemes for the lowest strata of the rural community was too inadequate. Judged from the expenditure, the performance of SFDA and MFAL agencies was not satisfactory. In physical terms, too, the gap between the achievements and targets was considerable. The reasons for the low performance were inherent in the manner these schemes were conceived and formulated.

Another difficulty experienced was the identification of the families of a small farmer, marginal farmer and an agricultural labour superimposed by the difficulty of locating the unemployed in the agricultural labour households; in the absence of any precise and specific criteria. The study showed that in a number of cases, the people were wrongly classified as small farmers or marginal farmers or agricultural labourers. Even the criteria adopted in identifying the eligible households in the two districts were not identical. In Nalgonda, the enumeration of farmers were based on their operational holdings whereas in Cuddapah it was done on the basis of ownership holdings. More or less similar difficulties were experienced in determining the unemployed in the identified households. To sum up, the suggestions offered to make the coverage of these programmes effective and fruitful is that a small owner who wishes to take up farming or wants to continue to farm should be covered by the programmes of the SFDA. In the case of both small and marginal farmers, some measure of consolidation should also be envisaged under this programme so that joint ownership-cum-operational holding could be a viable proposition. For the rural labour, attempts should be made to encourage labour organisations, which take up small works.

In the absence of any detailed survey of the district, an essential pre-requisite for the preparation of a realistic integrated district plan, the programme under the four schemes initiated and implemented were unrelated to the problems peculiar to these two districts.

During the course of the study it was observed that there was no rational distribution of decision taking and responsibilities among the three levels in the hierarchy. Thus, the need to evolve a machinery at the district level to formulate a district plan consistent with the State and the National Plan and also within the resources that are available cannot be gainsaid. However, at present, such an institution does not exist in any of the two districts. Detailed investigations or preparation of technical components of the different types of projects relevant to the areas do not appear to have been undertaken or even thought of.

Although there was no integrated plan as such, the concerned agencies, particularly S.F.D. Agencies in Nalgonda as well as in Cuddapah, published plans of action. The credit requirements in these plans were line estimates; so many rupees per acre as crop loan, so much amount per well and so much for pumpsets. What they failed to note was the peculiarities of individual cases and more than that the physical inputs under each of these activities so that their flow could be planned in advance. Further, they also indulged in ritual exercises of computing the returns on the outlay. In Nalgonda, in particular, detailed exercises relating to crop planning were undertaken. In all these cases, there was no uniformity in respect of the conceptual framework and no common methods of computing the rate of returns on different schemes was evolved. The approach and methodology adopted in such exercises were so unrealistic that in the case of crop planning exercises they promised a return ranging from 200 to 600 per cent. For a number of other activities such as dairy farming, poultry farming, animal breeding, training of artisans, etc., they did not even attempt to get some meaningful figures. Even where they indulged in this kind arithmetic they did not use the results in determining priorities in the sense the high yield activities receiving greater attention than the others.

In Cuddapah the position was not different. The rural employment schemes did not make any major departure from the conventional programmes of work. In view of the extreme uneven distribution of rain-fall over a number of years, efforts in the direction of more minor irrigation works did not appear at all relevant. The minor irrigation works may be useful as sources of employment during the drought years, unless of course, a lot of water was going waste. Any future programmes in this direction should aim at the adoption of appropriate storage methods, and should ensure a uniform flow of water for cultivation during the lean as well as better years. In the light of the quantities of water which may be made available at a uniform rate for a long period, an appropriate cropping programme has to be formulated. This type of water conservation may mean co-ordinated use of water in minor tanks and wells and increasing the moisture conservancy of the soil. Alternatively, there is need for going for a class of plantations which can survive in the face of such uneven availability of water.

The inability to ensure electric supply even when the sanction was given for electric pump-sets led to frustration in a large number of cases. There was a general feeling of disappointment on account of the failure to give electric connections in Nalgonda district. While extending crop loans the supply of inputs such as fertilizers, seeds, pesticides etc., were not properly arranged. In the areas of dairy, poultry, sheep breeding etc., inspite of ambitious programmes there was no prior planning to increase the supply of suitable animals and birds either from within the state or from outside the state. Where these animals were provided, there was no assured flow of feed. Similar factors were responsible for their inability to start any programmes for rural artisans. An important component of this coordinated planning of flow of inputs is the supply of credit. The primary

societies were in a bad shape and no advance action was taken to enable them to undertake the tasks earmarked for them. Commercial banks in both the districts surveyed were not yet ready to involve themselves in a big way in these programmes. On top of all this, very little attention was paid in trying to minimise the procedural work which ordinarily caused considerable delay in extending the loan to the farmers. The question of security which was basic to all the credit programmes designed for the poor and not too prosperous persons was not tackled in advance.

Another important input that is usually ignored in this context is that of training and education for small and marginal farmers and rural labour in various skills that are required for the operation of the schemes. The rural population expressed the need for such programmes. There was a reference to such training programmes only for artisans but even that never materialised. The agency should launch these training and education programmes not at district or Taluk headquarters but in the villages themselves.

The need for an integrated plan is no less important at the household level. A beneficiary was generally given one type of loan. Implicitly the approach appeared to be of their distribution to meet a large number into the scheme. In most cases the quantum of credit provided bore no relation to the actual needs. The major consequence of this approach was the failure to lay necessary foundations for sustained employment.

At the top of the hierarchy within the State there should be a single department responsible for the supervision, evaluation and implementation of these schemes, instead of two as was the case in Andhra Pradesh. At the district level the Zilla Parishad Institutions were incharge of Drought and Rural Works Programme. The executive officer and the Collector, as the head of the SFD Agency, was responsible for the formulation and implementation of these programmes and most of the field work was being done by the Panchayati Raj extension staff. Most of these extension staff are represented on the Agency but at the same time the Agency itself has started building up its own technical personnel, thus creating in some sense a competing cadre. The Agency was expected to act as a catalyst but whatever they have achieved so far does not prove that they have successfully played this role. The Agency has prepared the plan and endeavoured to assist the farmer in getting credit and other inputs but the achievements in this respect were limited. The present set up also creates some problems of line of command and both the Collector and the Zilla Parishad Chairman in the two distircts surveyed were not very much involved in these programmes notwithstanding their close formal association with the Agency. The entire work was entrusted to the Project Officer; and in one of the two districts surveyed the post of the project officer remained vacant for nearly six months.

The general feeling was that there was considerable scope for the extension staff for greater involvement in these activities by frequent visits to the villages and contacts with the farmer. Without this it will be very difficult for the farmer to take to better methods of cultivation. It will be desirable to encourage a new type of extension staff which more or less lives at least for a few years, if not indefinitely, with the rural community. This will enable them not only to render extension services to the neighbouring small and marginal farmers and others but also set an example in improved farming practices.

In the area of works, the execution of works such as, roads, munor tanks etc., were entrusted to the engineers of the Zilla Parishad. In spite of the

instructions that most of these works should be carried out departmentally, in most cases contractors were doing this work. On further probing it was understood that the existing financial regulations did not permit smooth departmental execution of these works, hence the presence of contractors. Also the employment figures provided by these agencies were a product of simple arithmetic; the given amount is divided by wage rate to obtain the figure of employment generated.

## VI.—Employment and unemployment in the selected regions of Assam :

### Scope and coverage :

The study was undertaken by the Department of Economics, Gauhati University, during December, 1972 and January, 1973. It covered selected urban blocks in six towns of Kamrup District, namely, Hajo, Rangia, Nalbari, Pathshala, Barpeta and Barpeta Road.

### Objectives :

- (i) To measure the extent of unemployment.
- (ii) To study the employment pattern.

### Sample design :

Two stage sampling design was used. Urban blocks were selected on the basis of the municipal records. In the selected blocks 1,402 households in all were listed and stratified in four groups :—

- (i) households having unemployed persons ;
- (ii) households having major share of their income from self-employment in cultivation ;
- (iii) households having major share of their income from self-employment in non-agricultural activities ; and
- (iv) households having major share of their income from salary or wage paid employment.

Ten per cent of the households from each of these four groups were selected on systematic random sampling basis. The total number of households thus selected was 351 comprising 3,110 persons. These households were taken up for in-depth study.

### Concepts used :

Employment and unemployment was studied with reference to a week as well as one year preceding date of survey. Persons not having any gainful work during the reference period but who were seeking and/or were available for work were considered to be unemployed. From the tables on age-distribution, it appears that persons aged 15 and above only have been considered for studying employment and 15 to 59 only for unemployment.

### Main findings :

#### A. Household size :

In 1,402 households listed in the urban areas selected for survey, a population of 13,355 was found, the average household size being 9.5. In the 351 households selected for in-depth study, 3,110 persons were enumerated and according to this the average household size came to 8.9 persons. Among

these persons only 594 persons were employed. Thus the average number of employed persons in a household was 1.7. On the other hand, the number of the unemployed persons per household was approximately 1.0. The average monthly expenditure for all the households amounted to Rs. 48.7 which is very much below the poverty line, particularly in view of the large size of a household.

### B. Labour force :

30.2 per cent of the population formed the labour force in the selected urban blocks of the towns under survey. In the labour force, it appears, persons of the age 15 and above only were considered.

In the Table (No. 1) below, the percentage distribution of persons in the labour force by age groups is given.

TABLE-I

*Percentage distribution of persons in labour force by age groups*

Age Group	Employed	Unemployed	Total
15—19	1·9	25·4	10·5
20—24	7·4	43·1	20·5
25—29	13·7	22·3	16·8
30—39	27·9	7·2	20·3
40—49	23·7	1·7	15·7
50—59	18·0	0·3	11·5
60 & above	7·4	..	4·7
<b>TOTAL</b>	<b>100·0</b>	<b>100·0</b>	<b>100·0</b>

As the distribution of persons outside the labour force by sex and age groups has not been indicated in the report, it is not possible to compute the participation rates by different age groups.

The labour force consisted of 87.5% males and 12.5 per cent females. 8.9 per cent of the persons belonged to the scheduled castes, 0.2 per cent to the scheduled tribes and the remaining 90.9 per cent to other castes.

The labour force comprised 63.2 per cent employed and 36.8 per cent unemployed persons. Among the males, the percentage of employed and unemployed was 65.25 per cent and 34.75 per cent respectively; among the females the percentage of the unemployed was as high as 51.30. While among the persons in the labour force belonging to the scheduled caste 30 per cent were unemployed, among those belonging to the scheduled tribe all reported to be unemployed. 47 per cent of the labour force had per capita household expenditure below Rs. 40 per month, which is not upto the subsistence level.

C. Employment :

Among the employed persons, 90.7 per cent were males and 93 per cent were females. As indicated in table No. 1 the bulk of the employed persons belonged to the age group 30-59 forming 69.6 per cent of the total employed. 7.4 per cent belonged to the age-group 60 and above and the remaining 23.0 per cent to the age group 15 to 29.

Sector-wise distribution of the employed persons is given in the table 2 below :

TABLE-2

*Percentage distribution of employed persons by sector of employment*

Sector	Percentage of the employed
1. Government . . . . .	21.7
2. Local Government . . . . .	3.6
3. Co-operative . . . . .	1.0
4. Private . . . . .	53.2
5. Domestic . . . . .	20.5
Total . . . . .	100.00

2. The pattern of employment indicated the predominance of the tertiary sector. Trade and commerce accounted for the employment of 33.8 per cent and services for 33.3 per cent of the working force. Agriculture, manufacturing industries, and transport had 17.0, 9.9 and 3.0 per cent of the working force in their fold.

During 1951 and 1972, there was no significant change in the industry of employment of the employed persons.

3. The distribution of the employed persons by activity status is given in the table below :

TABLE-3

*Percentage distribution of employed persons by activity status*

Activity Status	Percentage as per Usual Activity Status			Percentage as per Current Activity Status		
	Males Females Persons			Males Females Persons		
	2	3	4	5	6	7
1. Employer . . .	7.4	..	6.7	7.4	..	6.7
2. Own account worker .	56.2	10.9	52.0	57.1	10.9	52.9
3. Unpaid household worker . . .	5.6	71.0	11.7	5.6	67.3	11.3
4. Apprentices :						
(i) Paid . . .	0.6	..	0.5	0.6	..	0.5
(ii) Unpaid . . .	7.1	..	6.4	7.1	..	6.4

	1	2	3	4	5	6	7
5. Employee:							
(i) regular/ monthly/ fortnightly/ weekly . . .	20·2	10·9	19·4	20·2	12·7	19·6	
(ii) daily-wage . . .	0·7	3·6	1·0	1·1	5·5	1·5	
(iii) Casual . . .	2·2	3·6	2·3	0·9	3·6	1·1	
TOTAL . . .	90·8	9·2	100·0	90·8	9·2	100·0	

It will be seen from the table above that enquiries regarding employment and activity status were made on the basis of two reference periods—a long period covering a year or more (usual status) and a short period of a week preceding the date of enquiry. As the enquiry was confined to urban areas, no significant variation was noticed in the number of the employed persons or their activity status in the two reference periods. However, in respect of unpaid family workers the percentage of females as per usual status was 71.0 while as per current status it was 67.3. It may be mentioned that the predominant activity status (time criterion) was taken into consideration.

4. The percentage distribution of employed labour force by per capita monthly expenditure group is given below:

TABLE-4  
*Percentage distribution of employed persons by per capita monthly expenditure groups*

Per Capita Monthly Household Expenditure (Rupees)	Percentage of employment Persons
0—40 . . . . .	47·6
41—60 . . . . .	27·9
61—90 . . . . .	14·3
91—120 . . . . .	7·1
121—150 . . . . .	2·4
151—180 . . . . .	0·5
181—250 . . . . .	0·2

It will be observed that the 47.6 per cent of the employed persons belonged to families having per capita expenditure Rs. 0.40, which is below the poverty line.

5. *Under-employment :*

85.5 per cent of the employed persons were having work all the year round, 12.0 per cent had only seasonal employment and 2.5 per cent had casual or intermittent employment.

The following is an analysis of the mandays available for work during the reference period of a year preceding the date of enquiry in respect of the employed labour force :

	Number	Percentage
(i) mandays with full time work . . . . .	167,398	88.4
(ii) mandays with part-time work . . . . .	10,137	5.4
(iii) mandays available for additional work		
(a) full time . . . . .	9,435	5.0
(b) part time . . . . .	2,374	1.2
	189,344	100.0

It will be seen that of the total mandays available for work the employed persons were unemployed for 6.2 per cent of the mandays. The percentage of such underemployed persons to the employed labour force was 28. Among these under-employed persons 62.7% wanted additional or supplementary work within the town of their residence, 20.4% in rural areas and 16.9% in other urban areas. The problem was also studied with the reference period of a week and it was found that on 3.5 per cent of the mandays and for 12.9 per cent of the man-hours available for work the employed persons were available for additional or supplementary work. 59 per cent of the employed persons worked for less than 4 days in the reference week. However, as the study was confined to a few weeks only, it cannot be called a normal or average situation.

D. *Unemployed :*

(i) *Age-composition.*—The unemployed persons formed 36.8 per cent of the labour force in the sample population. Their distribution by age groups and age-specific incidence of unemployment are given in the table below:

TABLE-5

*Percentage distribution of unemployed by age groups and age-specific incidence of unemployment*

Age Group	Unemployed Persons	Age Specific Incidence of Unemployment
15—19	25.4	88.9
20—24	43.1	77.2
25—29	22.3	48.7
30—39	7.2	13.1
40—49	1.7	4.1
50—59	0.3	0.1
TOTAL . . . . .	100.0	36.8

It will be observed from the above table that while the number of unemployed persons is the highest in the age group 20-24, the incidence of unemployment is the highest in the age group 15-19, 88.8 percent of the unemployed persons were bachelors.

(2) *Educational standards :*

The percentage distribution of the unemployed persons by educational qualifications and incidence of unemployment is given in the table below.

TABLE-6

*Percentage distribution of unemployed persons by educational standard and incidence of unemployment in different educational groups*

Educational Standard	Percentage of Unemployment			Incidence of Unemployment		
	Males	Females	Persons	Males	Females	Persons
1. Illiterate . . .	1·1	6·7	1·9	7·3	14·3	10·1
2. Literate but below primary . . .	4·5	..	3·8	24·1	..	22·0
3. Primary . . .	3·8	..	3·2	14·5	..	12·9
4. Middle . . .	15·7	11·7	15·0	22·5	46·7	24·2
5. Secondary . . .	57·3	63·3	58·4	51·9	86·4	56·1
6. Graduates and above—						
(i) Agriculture . . .	..	..	..	..	..	..
(ii) Engineering and Technology . . .	1·1	..	0·9	25·0	..	25·0
(iii) Medicine and Surgery . . .	..	1·6	0·3	..	100·0	5·6
(iv) Mining and Geology . . .	..	..	..	..	..	..
(v) Banking/Audit/Accountancy . . .	..	..	..	..	..	..
(vi) Teaching . . .	0·4	..	0·3	12·5	..	11·1
(vii) Other professional subjects . . .	..	..	..	..	..	..
(viii) Arts, Science and Commerce . . .	16·1	16·7	16·2	48·4	76·9	51·9

The percentage of unemployed among the labour force with technical qualifications was 26 and with no technical education, 41.

(3) *Registration with employment exchange :*

43 per cent to unemployed males and 16.1 per cent of the unemployed females were registered with the employment exchanges. The percentage of the unemployed persons registered with the employment exchanges among the total unemployed classified by educational standard is given in the table below:

TABLE-7

*Percentage of the unemployed persons registered with employment exchanges classified by sex and educational standard*

Educational standard	Males		Females	
	Regi- ster- ed	Not Regi- ster- ed	Regi- ster- ed	Not Regi- ster- ed
Illiterate . . . . .	..	100	..	100
Literate but below primary . . . . .	..	100	..	100
Primary . . . . .	9·1	90·9	..	100
Middle . . . . .	26·7	73·3	28·6	71·4
Secondary . . . . .	44·5	55·5	15·8	84·2
Graduate & above . . . . .	70·0	30·0	9·1	90·9
<b>TOTAL</b> . . . . .	<b>43·2</b>	<b>56·8</b>	<b>16·1</b>	<b>83·9</b>

Among the unemployed persons not having registration with employment exchanges, 48.5 per cent gave no specific reasons for their non-registration; 18.1 per cent were ignorant of the facility, 25.9 per cent had not found the exchanges helpful and 6.5 per cent avoided registration due to cumbersome procedures involved.

#### *Job preferences :*

26 per cent of the unemployed persons wanted to set up their own enterprise. The reason given for not having done so already indicated that 62.2 per cent of them were lacking finance, 1.2 per cent had not been able to secure license, 23.2 per cent had no technical know-how and 13.4 per cent had other reasons.

The rest of the 74 per cent of the unemployed persons sought full-time paid jobs. Their distribution by place preference was as follows:

Within town . . . . .	36·3	per cent
Outside town but within the district . . . . .	21·5	„
Outside the district but within the state . . . . .	25·4	„
Outside the state . . . . .	16·8	„

In the table below, the percentage distribution of the unemployed by salary expected at different places is given.

TABLE-8

*Percentage distribution of unemployed persons by place preference and salary expected*

Monthly Salary Expected	Within Town	Outside Town within District	Outside District within the State	Outside State	Total
Below Rs. 50 . . .	..	..	..	..	..
Rs. 51—100 . . .	2·2	12·7	10·8	11·6	8·2
101—150 . . .	21·5	9·1	13·8	9·3	14·8
151—200 . . .	21·5	18·2	24·6	23·3	21·9
201—250 . . .	23·7	32·7	23·1	23·3	25·4
251—300 . . .	24·7	18·2	20·0	25·6	22·3
301—350 . . .	2·2	1·8	4·6	2·3	2·7
351—400 . . .	3·2	1·8	3·1	4·6	3·1
401—450 . . .	1·0	5·5	..	..	1·6
TOTAL . . .	100·0	100·0	100·0	100·0	100·0

(5) *Duration of unemployment :*

The percentage distribution of the unemployed persons by duration of unemployment is given below :

Period of Unemployment	Percentage
Less than 1 month . . . . .	0·8
1—3 months . . . . .	3·2
3—6 months . . . . .	11·3
6—9 months . . . . .	2·9
9—12 months . . . . .	16·2
12—18 months . . . . .	10·4
18—24 months . . . . .	17·9
24 months or more . . . . .	37·3

37.3 per cent of unemployed persons were waiting for a job opportunity for more than two years. Among such males, the majority had passed Secondary Exam. (51.5%). Among such females, the majority was of the graduates. In the table below the distribution of unemployed males and females by educational standards and duration of unemployment is given.

TABLE-9

*Percentage distribution of unemployed persons by duration of unemployment and educational levels*

Duration of Unemployment	Educational Standard							Total
	Illite-rate	Literate but below Primary	Primary	Middle	Second-ary	Graduates and above		
1	2	3	4	5	6	7	8	
<b>Males :</b>								
Less than 1 month	25·0	..	..	25·0	25·0	25·0	1·5	
1—3 months	.	..	..	..	83·0	16·7	2·3	
3—6 months	.	..	8·0	..	80·0	12·0	9·4	
6—9 months	.	..	..	6·3	..	50·0	43·7	6·0
9—12 months	.	..	3·2	3·2	9·8	80·6	3·2	11·7
12—18 months	.	2·1	..	4·2	8·6	72·3	12·0	17·7
18—24 months	.	..	8·5	4·2	15·8	57·9	22·8	21·4
24 & above	.	..	..	..	..	57·5	42·5	38·0
TOTAL	.	0·8	1·1	2·2	6·4	64·7	24·8	100·0
<b>Females :</b>								
Less than 1 month	..	..	..	..	..	..	..	..
1—3 months	.	..	..	..	..	80·0	20·0	7·2
3—6 months	.	..	..	..	..	100·0	..	11·4
6—9 months	.	..	..	..	..	75·0	25·0	5·7
9—12 months	.	..	..	..	..	80·0	20·0	7·1
12—18 months	.	..	..	..	14·3	71·4	14·3	30·0
18—24 months	.	..	..	..	..	88·2	11·8	24·3
24 & above	.	..	10·0	..	20·0	30·0	48·0	14·3
TOTAL	.	..	1·4	..	7·2	74·3	17·1	100·0

(6) The following table indicates the distribution of unemployed persons and the intensity of unemployment by the monthly per capita household expenditure group.

TABLE-10

*Percentage distribution of unemployed persons and intensity of employment by per capita monthly household expenditure*

Per Capita Monthly Expenditure Rupees	Percentage of Unemployed Persons	Percentage of Unemployed Persons to the Labour Force
0— 40	44·0	36·1
41— 60	38·2	45·6
61— 90	13·5	36·6
91—120	2·7	19·2
121—150	0·5	12·5
151—180	0·8	50·0
181—250	0·3	50·0
<b>TOTAL</b>	<b>100·0</b>	..

It will be observed that 44% of the unemployed persons belonged to the families living below the poverty line and having per capita monthly household expenditure Rs. 0·40.

However, the intensity of unemployment was very high in the expenditure groups Rs. 151-180, Rs. 181-250 and Rs. 41-60.

नवाचाल नगर

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**REPORT  
OF THE  
PANEL ON THE ASSESSMENT OF THE EXTENT OF  
UNEMPLOYMENT AND UNDER-EMPLOYMENT**

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**PART-II**



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**PART-II**



## SECTION-I

### Introduction

1.1 The Expert Committee on Unemployment in its 7th meeting on 17th June, 1971 considered the First Term of Reference of the Committee including the recommendations on the subject by the Committee of Experts on Unemployment Estimates under the chairmanship of Prof. M. L. Dantwala, the work of the inter-departmental committee set up by the Planning Commission under the chairmanship of the Employment Commissioner to suggest follow-up action on the recommendations of the Dantwala Committee, the follow-up action actually proposed by this inter-departmental committee, the work done by the working groups on concepts and definitions appointed by the Central Statistical Organisation, the studies having bearing on the assessment of unemployment in the country carried out by different agencies in the past and proposed to be taken up in the near future. The Expert Committee on Unemployment felt that it would be conducive to more expeditious disposal of work and better technical guidance and supervision if a Panel was constituted for the First Term of Reference of the Committee. Accordingly, on 26th July, 1971, a Panel under the chairmanship of Dr. Ashok Mitra and consisting of Dr. Gautam Mathur, Mr. A. Chandra Sekhar and Mr. S. C. Chaudhri was constituted. The Panel was authorised to coopt from time to time such persons from outside as they may consider necessary. In regard to the subject allocated to it, the Panel was expected to ascertain facts, locate the principal problem areas and submit its recommendations for the Committee's consideration. Subsequently, the Panel invited Dr. J. N. Sinha of the Institute of Economic Growth, Delhi and Dr. J. Krishnamurthy of Delhi School of Economics to participate(,) in the meetings of the Panel as special invitees and give the Panel the benefit of their experience and professional advice.

1.2 In November, 1971, the Secretariat of the Committee indicated to the Chairman of the Panel that they proposed to refer the fifth term of reference of the Committee to the Panel and the Panel may be expanded, if necessary, by coopting more members so that the fifth term of reference could be effectively dealt with. Both these suggestions from the secretariat were considered by the Panel in its third meeting on 20th December, 1971 and this assignment from the Committee was also accepted by the Panel.

1.3 The Panel considered the scope of the fifth term of reference of the Committee, decided upon the items of information to be collected, got the informations collected by the Secretariat, examined the mate-

rial and prepared the report on its observations and recommendations. The whole task was completed in five meetings between December 1971 & August 1972. The report was adopted in the 7th meeting of the Panel on 6th September, 1972.

1.4 The Report consists of the scope of the fifth term of reference of the Committee, the existing arrangements for appraisal of unemployment and under-employment, the manpower planning etc., both in and outside the government at national and State level, a framework for manpower planning in the circumstances of the country both now and in future, the data collection for continuous appraisal of the employment and manpower situation and recommendations on the organisational structure for meeting the needs. In the process of the examination of the subject entrusted to the Panel, the Panel has looked into 11 main agencies of the government which are dealing with different aspects of the subject with regard to their functions, their organisational structure, the coordination with other agencies, the type of information collected and type of analysis carried out. The Panel also examined the material on the functioning of similar agencies in U.S.A., U.K. and Canada for purposes of comparison. The basic information on these organisations is incorporated in the appendices to the report. The machinery for dealing with employment, unemployment and manpower planning has been reviewed on a number of occasions and recommendations have been made exclusively on this subject or as a part of the recommendations on other allied subjects. The Panel has looked into some of these recommendations also.

1.5 The scope of fifth term of reference of the Committee as defined by the Panel for the purpose of this report is discussed in the next section of the report. At this stage, it is relevant to point out that the question of continuous appraisal of the changing employment and manpower situation and assessment of demand and supply is inextricably linked up with the development programmes in all sectors of the economy and the implementation of those programmes at all levels from the Centre to the remotest peripheral village. The Panel has, however, taken a very practical view in this matter. The appraisal of the development process with regard to employment and manpower situation can be conceived of in four broad facets, namely :

- (a) the periodical assessment of the actual supply and demand position of different types of manpower, the assessment of the labour force and its categorisation in a meaningful way to work out a balance between the available labour force and the employment potential on all-India basis, on state basis, on regional or group basis;

- (b) the pre-implementation appraisal of the development programmes in different sectors as a whole and in relation to the employment and manpower situation;
- (c) concurrent evaluation and continuous monitoring of individual programmes in the course of their implementation with a view to assessing their impact on employment and manpower situation and modifications in the programmes by way of remedying the imbalances; and
- (d) overall study of socio-economic development in small areas like districts or still lower geographical units to examine employment and manpower balance.

1.6 The Panel has considered the machinery for appraisal at the central and state level in respect of the facet (a) mentioned above including the role of the same machinery in attending to facet (b) above so far as it relates to the assessment of the impact on employment and manpower situation, the extention of this machinery or its inter-relationship with different agencies at the national and state level. The Panel has not gone into the arrangements for appraisal of the facets (c) and (d). The facet (c) could in matter of details be handled by the respective Central agencies and for the purpose of the Committee on Unemployment this aspect would presumably be studied by the respective Working Groups. Facet (d) could form a function of the district planning machinery or of the agency which is concerned with the condition of all development programmes at the district levels. Even the practicability of this aspect of evaluation appears to be doubtful unless and until it is decided that units like districts or even smaller geographical areas are sought to be made self-contained with regard to manpower and employment situation, which does not appear to be a practical proposition.

## SECTION-II

### Fifth Term of Reference and its Scope

2.1 The Expert Committee on Unemployment is required "to suggest a suitable machinery at the Centre and at the state level for a continuous appraisal of the changing employment and manpower situation and assessment of long term demand and supply".

2.2 The Committee has referred this item to the Panel on First Term of Reference for study and making suitable remedial recommendations on the subject for consideration by the Committee.

2.3 Broadly, manpower planning involves :

- (a) the estimation of the needs for new employment opportunities, evaluating the manpower implications of Plan objectives and subsequent modifications in them during the execution of the plans. These activities involved the examination of the quantitative and qualitative aspects of present and future manpower supply and demand and the evaluation of the existing data that may be used for planning purposes, suggesting refinements and collection of additional data, if necessary.
- (b) Participation in the finalisation of the overall plan including ; estimating manpower requirements for current and perspective plan periods; programming manpower inputs of global and sectoral plans ; formulating manpower criteria for consideration in the choice of project; setting educational and training targets.
- (c) Estimation of employment to be created outside the plan and suggesting measures for its achievement.
- (d) Evaluation of plans as they are being executed to determine their impact on manpower and employment and to identify problems and remedial action that may need to be taken including the revision of plans.

2.4 Continuous appraisal of the changing employment and manpower situation and assessment of long term demand and supply should include :

- (i) the assessment of the requirements of technical and other personnel taking into consideration the future needs and changes in technology;

- (ii) formulating policies necessary for reorganising technical and professional training in such a way as to meet the requirements with proper balance between supply and demand across space and over time;
- (iii) continuous study of the different components of the labour force to help formulate schemes for absorbing the labour force in gainful activities;
- (iv) study of the interaction of social, economic, technical and financial factors which impinge upon the manpower and employment situation; and
- (v) ensuring an information system for each of the above components to enable the collection, compilation and interpretation of data in an integrated way to ensure a balanced approach to policy formulation.



## SECTION-III

### Existing Arrangements

3.1 The work relating to manpower planning and employment as defined above is spread over a number of official and non-official agencies at the national and state levels. In particular, the following organisations at the national level with their counterparts at the state level or the field organisations at different levels of administration are involved in this process :

- |  |   |
|--|---|
| (i) Directorate General of Employment & Training ;   | Dealing mainly with employment and unemployment situation and employment generated.   |
| (ii) Employment & Labour Division of the Planning Commission ;   |   |
| (iii) Employment & Manpower Cell in Cabinet Secretariat ;  |   |
| (iv) Directorate of Manpower ;   | Estimation of the technical manpower supply and demand.   |
| (v) Institute of Applied Manpower Research ;   |   |
| (vi) Council of Scientific and Industrial Research ;   |   |
| (vii) Ministry of Education in association with Ministry of Agriculture and Ministry of Health and through a number of Statutory Councils for technical and professional education of different types. | Educational policies, standards and modifications.  |
| (viii) Office of the Registrar General   | Production of data on a number of socio economic matters including employment, unemployment, availability of manpower of different type and manpower utilisation. |
| (ix) National Sample Survey Organisation   |   |
| (x) Central Statistical Organisation   |   |
| (xi) Labour Bureau, Simla  |   |

3.2 Available information on the organisational structure, the functions, the scope and methods of work, the types of data collected and studies and analyses carried out by these organisations are given in Appendices I to X.

3.3 This is not the first time that the examination of the machinery which deals with manpower planning and employment situation has taken place. It has all along been felt during the last few years that something needs to be done in the matter so that effective coordination can be ensured. Of particular importance are the views of the Administrative Reforms Commission, the National Commission on Labour and the Ministry of Labour & Rehabilitation. The following paragraphs are some of the extracts from the report of the study team appointed by the

Administrative Reforms Commission to study the machinery of the Government of India and its procedure of work. The study team recommended that there was need for central manpower planning for governmental requirements as distinct from the requirements of the country as a whole. Further, they observed as follows :

"This subject embracing the whole ambit of manpower, namely, planning, policies and programmes is at present allocated to the Home Ministry because of its link with the subject of services. One view could be that manpower planning should, in the new shape of things, be fitted into the proposed Department of Personnel. While this may in some ways be good for manpower administration it would start a process of blurring the correct role of the new central personnel agency, on which feature we place so much importance. *In our view the correct place of manpower administration is the Department of Labour and Employment.* This arrangement would be in line with the practice in other countries and also with what is recognised internationally by the fact of manpower planning being one of the subjects looked after by the International Labour Organisation. It might be argued that this arrangement may not give the necessary support to manpower administration, because the chief concern of the Department of Labour and Employment has in the past been industrial relations and it has not handled matters relating to labour in the sophisticated fields such as engineers and scientists. We do not see why the subject of labour should, for all times to come, connote only industrial relations and matters concerning lower strata labour. It should be the concern of the Department of Labour and Employment to range over all facets of the employment problem and it seems to us that manpower administration is an important aspect of that work. What is important is not what this department has been dealing with in the past but what it ought to deal with in the future. Once the subject of manpower administration is allotted to this department along with the unit which has been handling it so far in the Ministry of Home Affairs, there is no reason why it should not be able to do justice to it. This might become one step in the direction of reorienting the attitude of the Department of Labour and Employment to fields other than industrial relations" (Emphasis added).

3.4 On these considerations, the study team recommended "Manpower administration, manpower planning policies and programmes including the Directorate of Manpower and Institute of Applied Manpower Research should be transferred from the Ministry of Home Affairs to the Department of Labour and Employment of the Ministry of Labour and Employment".

3.5 A study group on employment and training appointed by the National Commission on Labour suggested that the Directorate General of Employment and Training should cover the following broad subject :\*

- (a) Manpower Budgeting and Forecasting;
- (b) Employment Market Information;
- (c) Surveys and Studies;
- (d) Statistics;
- (e) Vocational Guidance and Aptitude Tests;
- (f) Occupational Information and Job Analysis;
- (g) Industrial Services, Job Development and Publicity;
- (h) Policy and Procedure;
- (i) Evaluation and Development;
- (j) Labour and Vacancy Clearing and Deployment of Surplus Persons and Centralised Advertisements;
- (k) Administration.”

3.6 They further suggested that the Manpower Division of the Directorate should be headed by an additional director and each of the divisions indicated above should be headed by a deputy director assisted by a number of assistant directors, senior research officers, research officers, employment officers, investigators, etc. They suggested the establishment of another division under a deputy director for unemployment insurance.

3.7 The Ministry of Labour and Rehabilitation have expressed their views time and again on the reorganisation of the manpower planning and employment machinery in the country. In their memorandum to the National Commission on Labour, the Department of Labour and Employment observed as follows :—

“Keeping in view the need for more effective utilisation of personnel for evolving and executing sound national manpower policies particularly at the local level and in the rural areas, *the Department of Labour and Employment seems to be most suited for the formulation and administration of manpower programmes in the country.* The existence of a net-work of employment offices and training institutes under the Department which are located in every important community of the country, lend further support to its claim

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\*Report of the Study Group on Employment and Training, National Commission on Labour (pp. 44 45.)

for manpower research essential for planning and utilisation of human resources at the national, state and local levels. Experience of some of the more advanced countries of the world like U.S.A., Germany and U.K. is also a testimony of the growing dependence of the Government in these countries on their Department of Labour and Labour Organisations for collection, analysis and dissemination of information in the field of manpower (Emphasis added.)

3.8 The Third Pay Commission invited the attention of the Ministry of Labour and Rehabilitation to the fact that as many as five organisations, namely, Cabinet Secretariat, the Planning Commission, Ministry of Home Affairs, Ministry of Labour and Institute of Applied Manpower Research deal with the subject of manpower, leading perhaps to overlapping and duplication of efforts. The Pay Commission felt that some rationalisation and saving might be possible by a reallocation of functions. This is still another indication that the agencies concerned with the rationalisation of the Government machinery are concerned about the matter.

3.9 While reviewing the official estimates on unemployment from 1951-71 and making certain suggestions for obtaining more realistic data, Mr. P. C. Mathew, former Secretary to the Government of India, Department of Labour and Employment and later Chief of the ILO Regional Team for Employment Promotion, Bangkok, expressed the following views on the reorganisation of machinery for evaluation of employment, unemployment and manpower planning :—

“Responsibility for manpower planning is dispersed over a number of ministries of the Government of India. The Home Ministry which contains a Directorate of Manpower is in charge of the Institute of Manpower Planning. Manpower Planning is not, therefore, the responsibility of the Labour Ministry which is, however, concerned with the agricultural labour enquiries, the employment exchanges and the Employment Market Information. The Labour Ministry has nothing to do with the sample labour force surveys which are the responsibility of the Central Statistical Organisation. The Planning Commission has of course the general responsibility of coordinating all these, but instead of entrusting the task of collecting and supplying correct labour force information on a regular basis to a single executive department and assuming for itself the task of using the information after critically analysing it, the Planning Commission has taken upon itself the difficult task of compiling the information from grossly inadequate basic data with results which have been reviewed in the above paragraphs. To remedy the situation it is necessary that these functions should be entrusted to a single executive department.”

3.10 The functions in respect of manpower planning and employment planning are shared by five organisations listed earlier. The Directorate General of Employment and Training is the principal organisation in this regard. It is mainly responsible for providing an employment service which seeks to bring the employer and the employee together. It runs training courses for equipping a part of the labour force with certain skills which might be useful to them in getting employment. It also tries to anticipate (not to estimate) the future requirements of trained manpower of the middle level. The department is doing this work through its counterparts at the State level, viz., employment exchanges of different types and industrial training institutes. At times, the Directorate undertakes through these field organisations, studies pertaining to the Characteristics of unemployed persons, or persons seeking a particular type of employment. The Directorate functions as the focal point for liaison between a number of agencies dealing with different aspects of employment. The Directorate at present is rather more in the nature of an executive agency for providing employment services than for attending to the comprehensive aspects of manpower and employment planning.

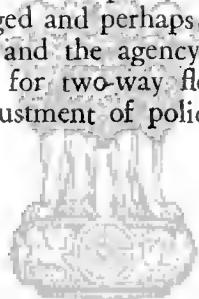
3.11 The Directorate of Manpower in the Ministry of Home Affairs tries to ensure a balance between the supply of and demand for technical manpower. It is expected to undertake suitable studies and has field officers in the States in the form of Employment Officers of the State Government. The role of this organisation is rather passive (See Appendix IV). The Directorate however, has an important research and study wing in the form of the Institute of Applied Manpower Research, which undertakes some evaluative studies on different aspects of manpower planning and utilisation. In a limited way this entire organisation complements the D.G.E.&T. It collates material relating to technical manpower, while the D.G.E.&T. deals with general manpower.

3.12 The employment cell in the Cabinet Secretariat is a recent creation with very limited functions, i.e., watching the progress of certain crash programmes formulated and being implemented for immediate relief from unemployment. This cell also coordinates studies on the methodological problems.

3.13 The Planning Commission is expected to coordinate all planning activity including of course manpower and employment planning. The Labour and Employment Division of the Planning Commission is not in a position to coordinate all the agencies in the field and many important questions are dealt with by other Divisions of the Commission which do not always operate in close concert with

the Labour and Employment Division. The Division is not in a position to ensure a continuous appraisal of all the available information or to use the information adequately for policy formulation.

3.14 The functions of the Ministry of Education and its counterpart organisations at the State level in respect of manpower planning and employment are very important. The Ministry of Education is responsible for the expansion of general education and provision of technical and professional educational facilities to meet the demand of the public. It is not primarily concerned with the employment prospects of those turned out by the educational and other institutions under it or the assessment of the impact of changes in enrolments on the present or future employment situation. The Ministry of Education collects data through its normal channels and field organisations on those aspects of education which are helpful in planning its own programmes. These data are a by-product of its own administrative functions, though they would be of use in studying employment or manpower aspects of education. The Ministry of Education, therefore, is not playing any direct part in manpower or employment planning. However, a link can be forged and perhaps needs to be forged between the Ministry of Education and the agency responsible for manpower planning and employment for two-way flow of information on this subject and for mutual adjustment of policies when necessary.



## SECTION-IV

### A Suggested Framework for Manpower Planning and Employment

4.1 The problem associated with the collection of data have been exhaustively discussed by the Dantwala Committee. It is not necessary to cover the ground once more here. Different organisations collect data for their respective purposes which indirectly throw light on particular aspects of the unemployment situation. There is no mechanism at present to bring these data together for an integrated study of problems of manpower and employment. There is thus a need for effective coordination for ensuring comprehensive and timely information on manpower and employment planning.

4.2 The problem of manpower planning and employment has three broad facets, namely, creating opportunities for a large proportion of the labour force which is currently unemployed or under-employed; planning the supply of technical and other qualified personnel for development programmes both for the present and for future, arranging the supply of technical personnel in accordance with the plan. Each of these facets has its planning, executive and evaluatory aspects. There is need for establishing an organisational structure and a system of procedures to ensure effective coordination and evaluation.

4.3 For some of the existing organisations, the functions relating to manpower planning and employment creation are exclusive and can be merged with similar functions of other organisations. For example, the functions of the Directorate of Manpower and of the Employment Cell in the Cabinet Secretariat, which are exclusively related to manpower planning and employment, are not inter-linked with the other functions of the parent organisation and can easily be transferred to an apex organisation which might be devised for guiding manpower planning and employment creation.

4.4 For a number of other existing agencies, the problem may be somewhat more difficult. For example, the Ministry of Education is responsible for the collection of data on aspects of education. These data are primarily intended for the administrative purposes of the Ministry. However, some of the data are useful for manpower planning and the planning of employment. The responsibility for collection of such data cannot be readily taken away from the Ministry of Education and merged with any other system. There is, therefore, need for finding out effective methods for coordinated action with the Ministry to serve the needs for education as well as employment and manpower planning.

4.5 The question of keeping a continuous watch on the employment, unemployment and under-employment situation and of ensuring a balance between supply of and demand for labour in different sectors necessitates monitoring of the employment generating capacity of the sectoral programmes.

4.6 Here, no routine statistical system can be made to answer all questions, serve all purposes and meet all needs for all time. In an evolving situation, the requirements of data, the concepts on which they are to be based, the periodicity of collection of information and the form in which they are to be compiled and used, would vary from time to time. Administratively, effective and technically competent arrangements must be such as to meet this challenge.

4.7 Field organisations for the collection of statistics are large. The greater the number of organisations involved, the more are the procedural formalities and delays in processing. In planning for manpower and employment, particularly for placements and modifications in training, timely information has to be ensured in any system of co-ordinated data collection. But very often the overlapping of objectives between the different agencies results in a duplication of efforts.

This will suggest that our efforts should concentrate on ensuring the following objectives :

- (a) Integration of the organisation which deal directly and exclusively with the planning of manpower and employment to form one organisation or executive department of the Government of India.
- (b) Technical coordination between and avoidance of duplication, among the organisations dealing with professional education and training;
- (c) Better coordination among the agencies which generate data on manpower planning and employment;
- (d) A mechanism to ensure coordination between the functions described in (a), (b) and (c) above, so that policies and programmes consistent with the overall objectives of planning manpower and employment are formulated and effectively implemented and continuously monitored.

4.8 Taking into account the various recommendations made in the past, the Panel feels that, at the Centre as well as in the State, agencies which deal directly and exclusively with the planning of manpower and employment should be merged to form an executive department of the Government. In particular, at the national level, the Directorate of

Employment and Training, the Directorate of Manpower, the Employment Cell in the Cabinet Secretariat should be merged to form a Department of Employment and Manpower Planning. This Department should have a division to deal with each of the following subjects :—

- (i) Manpower budgeting and forecasting.
- (ii) Employment Market Information.
- (iii) Surveys and Studies.
- (iv) Statistics.
- (v) Occupation and job analysis.
- (vi) Monitoring of employment generation.
- (vii) Formulation and promotion of programmes of employment generation.
- (viii) Monitoring specific developments which are likely to lead to large-scale unemployment.

4.9 The Ministry of Education should be entrusted with the responsibility of coordinating the activities of the different agencies of the Government which deal with aspects of professional training, professional education and general education. The procedural details in this regard should be worked out by an inter-departmental committee consisting of the representatives of the various agencies.

4.10 There is need for a machinery (a) to ensure overall coordination among the agencies generating data; (b) to analyse the available data, suggest changes from time to time in the system of collection of data; and (c) to formulate practical policies and programmes pertaining to the planning of manpower and employment from time to time in the light of developments in the economy.

4.11 To ensure overall coordination between the agencies proposed as per the recommendations in paras 4.8 and 4.9 above, and to guide the functions suggested in recommendation in para 4.10, there should be a National Commission on Manpower Planning and Employment.

4.12 The Commission may consist of a full time Chairman and 3 to 5 members. The Chairman should be an eminent public figure preferably with past experience in different areas of planning for manpower and employment. The other members should be professional individuals or administrators with a wide backward of experience in the following fields:—

- (i) Statistics and evaluation.

- (ii) Agricultural or industrial economics.
- (iii) Finance and resources planning.
- (iv) Education and social sciences.

4.13 The Secretariat of the Commission should consist of small specialised technical units in the various disciplines.

*Functions :*

4.14. The Commission should decide upon its own methods and procedures and should :

- (a) engage in periodical reviews of the situation pertaining to manpower, employment and unemployment indicating critical areas needing attention;
- (b) make projections of labour force and manpower on the basis of available evidence and at an adequate degree of disaggregation;
- (c) evaluate the supply of and demand for manpower at different levels in the short and the long run keeping in view changes in investment decisions and output targets, changes in technology and in the light of changing circumstances;
- (d) as far as possible, formulate employment norms at least for sectors such as organised industry, mining etc. and continuously check such norms against evidence of employment generated; and
- (e) suggest from time to time changes in the functions and organisational structure of the agencies providing data.

Sd./— <b>(ASHOK MITRA)</b> <i>Chairman</i>	Sd./— <b>(S. C. CHAUDHARI)</b> <i>Member</i>	Sd./— <b>(A. CHANDRA SEKHAR)</b> <i>Member</i>
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Sd./— <b>(H. R. SHARMA)</b> <i>Secretary</i>
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NEW DELHI,

*Dated : the 7th October, 1972.*

## SECTION-V

### CONCLUSIONS AND RECOMMENDATION

1. Different organisations collect data for their respective purposes which indirectly throw light on particular aspects of the unemployment situation. There is no mechanism present to bring these data together for an integrated study of the problems of manpower and employment. There is thus a need for effective coordination for ensuring comprehensive and timely information on manpower and employment planning.

(Para 4.1)

5.2 The problem of manpower planning and employment has three broad facets, namely, creating opportunities for a large proportion of the labour force which is currently unemployed or under-employed; planning the supply of technical and other qualified personnel for development programmes both for the present and for future; and arranging the supply of technical personnel in accordance with the plan. Each of these facets has its planning, executive and evaluatory aspects. There is need for establishing an organisational structure and a system of procedures to ensure effective coordination and evaluation.

(Para 4.2)

5.3 Some of the existing organisations deal exclusively with functions relating to manpower planning and employment creation and they can be merged with other organisations with similar functions. In the case of some other existing agencies e.g. the Ministry of Education the problem may be somewhat difficult as the data collected by that Ministry are primarily intended for their administrative purposes. The responsibility for collection of such data cannot readily be taken away from that Ministry. There is, therefore, need for finding out effective methods for coordinated action with that Ministry to serve the needs of education as well as employment and man-power planning.

(Para 4.3, 4.4)

5.4 The question of keeping a continuous watch on the employment, unemployment and under-employment situation and of ensuring a balance between the supply of and demand for labour in different sectors necessitates monitoring of the employment generating capacity of the sectoral programmes.

(Para 4.5)

5.5 In an evolving situation, the requirements of data, the concepts on which they are to be based, the periodicity of collection of information and the form in which they are to be compiled and used would vary from time to time. Administratively effective and technically competent arrangements must be made to meet this challenge.

(Para. 4.6)

5.6 At the Centre as well as in the States, the agencies which deal directly and exclusively with the planning of manpower and employment should be merged to form an executive department of the Government. In particular, at the national level, the Directorate General of Employment and Training, the Directorate of Manpower and the Employment and Manpower Cell in the Cabinet Secretariat should be merged to form a Department of Employment and Manpower Planning. This Department should have a division to deal with each of the following subjects :

- (i) Manpower budgeting and forecasting.
- (ii) Employment Market Information.
- (iii) Surveys and Studies.
- (iv) Statistics.
- (v) Occupation and job analysis.
- (vi) Monitoring of employment generation.
- (vii) Formulation and promotion of programmes of employment generation.
- (viii) Monitoring specific developments which are likely to lead to large-scale unemployment.

(Para 4.8)

5.7 The Ministry of Education should be entrusted with the responsibility of coordinating the activities of different agencies of the Government which deal with aspects of professional training, professional education and general education. The procedural details in this regard should be worked out by an inter-departmental committee consisting of the representatives of the various agencies. (Para 4.9)

5.8 There is need for a machinery (a) to ensure overall coordination among the agencies generating data; (b) to analyse the available data and suggest changes from time to time in the system of collection of data; and (c) to formulate practical policies and programmes pertaining to the planning of manpower and employment from time to time in the light of developments in the economy. (Para 4.10)

5.9 To ensure overall coordination among the agencies concerned and to give them guidance there should be a National Commission on Manpower Planning and Employment. The Commission may consist of a full time chairman and three to four members. The chairman should be an eminent public figure preferably with past experience in different areas of planning in manpower and employment. The other members should be professional individuals or administrators with a wide background of experience in the following fields :

- (i) Statistics and evaluation.

- (ii) Agricultural or industrial economics.
- (iii) Finance and resources planning.
- (iv) Education and social sciences.

The secretariat of the Commission should consist of small specialised technical units in the various disciplines. (Para 4.11, 4.12 & 4.13)

#### 5.10 The Commission should :

- (a) undertake periodical reviews of the situation pertaining to manpower, employment and unemployment and indicate critical areas needing attention;
- (b) make projections of labour force and manpower on the basis of available evidence and with an adequate degree of disaggregation;
- (c) evaluate the supply of and demand for manpower at different levels in the short and the long run keeping in view changes in investment decisions and output targets and changes in technology and in light of the changing circumstances;
- (d) formulate, as far as possible employment norms at least for the sectors such as organised industry, mining etc. and continuously check such norms against the evidence of employment generated; and
- (e) suggest, from time to time changes in the functions and organisational structure of the agencies providing data. (Para 4.14)

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**Appendices to Part II  
of the**

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**REPORT**

**OF THE**

**PANEL ON THE ASSESSMENT OF THE EXTENT OF  
UNEMPLOYMENT AND UNDER-EMPLOYMENT**

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**Appendices to Part II  
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APPENDIX-I  
Directorate General of Employment & Training

**1. Function and scope of work :**

- (i) The development and administration of Employment service including placement facilities to all categories of work seekers, specialised services to physically handicapped, Scheduled Castes and Scheduled Tribes, ex-servicemen, East Pakistan Migrants and repatriates from Burma and Ceylon.
- (ii) Collection of data on employment and manpower under the Employment Market Information Programme on a continuing basis and its collation, analysis, interpretation and dissemination at district, state and national levels.
- (iii) Reducing the extent of imbalances in the supply and demand of manpower particularly, in respect of educated manpower through vocational guidance and employment counselling, vacancy labour clearing machinery, etc.
- (iv) Occupational research and analysis including programme of aptitude testing of applicants seeking admissions to Industrial Training Institutes and apprentices training, etc.
- (v) Survey and studies in the field of employment, unemployment and manpower.
- (vi) Implementation of training programmes in engineering and non-engineering trades at the craftsmen and supervisors level.
- (vii) Implementation of Apprentices Act, 1961. Implementation of Employment Exchanges (Compulsory Notification of Vacancies) Act, 1959.
- (viii) Diversification of training programmes to meet the changing needs of the industry.
- (ix) Implementation of part-time training programmes of the existing workers for upgrading their practical skills and knowledge.

**2. Organisation at the headquarters :**

The Directorate General of Employment and Training consists of the following officers Posts :

- (i) Director General—Joint Secretary.
- (ii) Director of Employment Exchanges.
- (iii) Director of Training.
- (iv) Deputy Secretary and Additional Directors, Deputy Directors, Assistant Directors, Additional Director Training, Deputy Directors Training, Assistant Directors Training, Technical Officers.

**3. Field organisations :**

The Directorate General of Employment & Training has its counter-part at the State levels known as the State Directorates of Employment and/or training. A net work of Employment Exchanges and Industrial Institutes

spread over the length and breadth of the country serves as the field organisation. The State Governments are at present in full administrative and financial control of the Employment Service and Vocational Training Programmes (both institutional and apprenticeship) in their respective States. The State Directorates of Employment and/or training are responsible for the day-to-day administration of the Employment Exchanges and Industrial Training Institute. However the work relating to laying down procedures, policies and standards in case of both Employment & Training Services is the responsibility of the Directorate General of Employment and Training.

Although the training programmes at craftsmen level is now the responsibility of the State Governments, the Directorate General of Employment & Training is directly responsible for the 7 Central Training Institutes for instructors and one Institute each for training of foremen and highly skilled craftsmen where training is imparted to craftsmen instructors, highly skilled craftsmen foremen and for officers and staff of Central and State Governments who control, regulate and direct training programmes of both the institutional and apprenticeship type. Besides, the Directorate General of Employment & Training through the agency of the Central Staff Training and Research Institute, Calcutta, conducts research in the trades and training techniques.

Similarly a Central Training Institute for Research and Training in Employment Service is run directly by the Directorate General of Employment & Training for imparting training in Employment Service techniques to the officers of the National Employment Service in various States and for conducting research in Employment Service operations. In addition, 4 Vocational Rehabilitation Centres for the Physically Handicapped persons and 4 Coaching-cum-guidance Centres for Scheduled Castes and Scheduled Tribes applicants to provide confidence building training to persons belonging to these communities to improve their employment potential, are also being administered directly by the D.G.E. & T. The D.G.E. & T. is also directly responsible for running the Central Employment Exchange which provides vacancy/labour clearing mechanism at the national level. Work connected with expeditious resettlement of ex-servicemen is also being undertaken by the D.G.E.&T.

#### **4. Co-ordination with other organisations :**

The principal co-ordination mechanism at the national level are, Central Committee on Employment, National Council for Training in Vocational Trades and Central Apprenticeship Council. These agencies include representatives of the Central Ministries, State Governments, Employers' and Employees' Organisations and other interests directly involved in the employment, manpower planning and training. Besides, a Working Group on National Employment Service also exists comprising representatives from States and Centre which advises the D.G.E. & T. in the organisational & procedural matters. In addition, a Central Coordination Committee on Vocational Guidance & Employment Counselling also functions at the Centre to advise the D.G.E. & T. and Ministry of Education for coordinated development of Vocational Guidance Programmes through schools/colleges, Employment Exchanges and University Employment Information and Guidance Bureaux. Similar arrangements also exist in regard to the craftsmen & Apprenticeship Training Programmes. The Directorate General of Employment and Training is also declared as the National Focal Point to ensure coordination and liaison between the International Labour Organisation and the agencies of the Government of India State Governments in so far as international cooperation in the field of employment & vocational training is concerned.

### 5. The type of data collected and analysis carried out

The Directorate General of Employment & Training collect data mainly from three sources, namely returns from employment exchanges, data collected through employment market information programme, returns from the training institutes and special studies on employment and unemployment carried out by Research Organisations or directly by the Directorate through its subordinate offices. The data collected under the EMI Programme are being compiled and analysed at area, state & national levels in conjunction with the employment exchange statistics. Based on these analysis, the D.G.E. & T. brings out on a regular basis Quarterly & Annual Employment Reviews, Reports on Occupational-cum-Educational Pattern of Employees in Public & Private Sectors, in addition to *ad hoc* reports. Under the Occupational Research and analysis programme of the D.G.E. & T. publications such as, the National Classification of Occupations, Handbooks on Training Facilities, Career Pamphlets and publications, Bulletin on Job Opportunities, etc., are also brought out regularly.

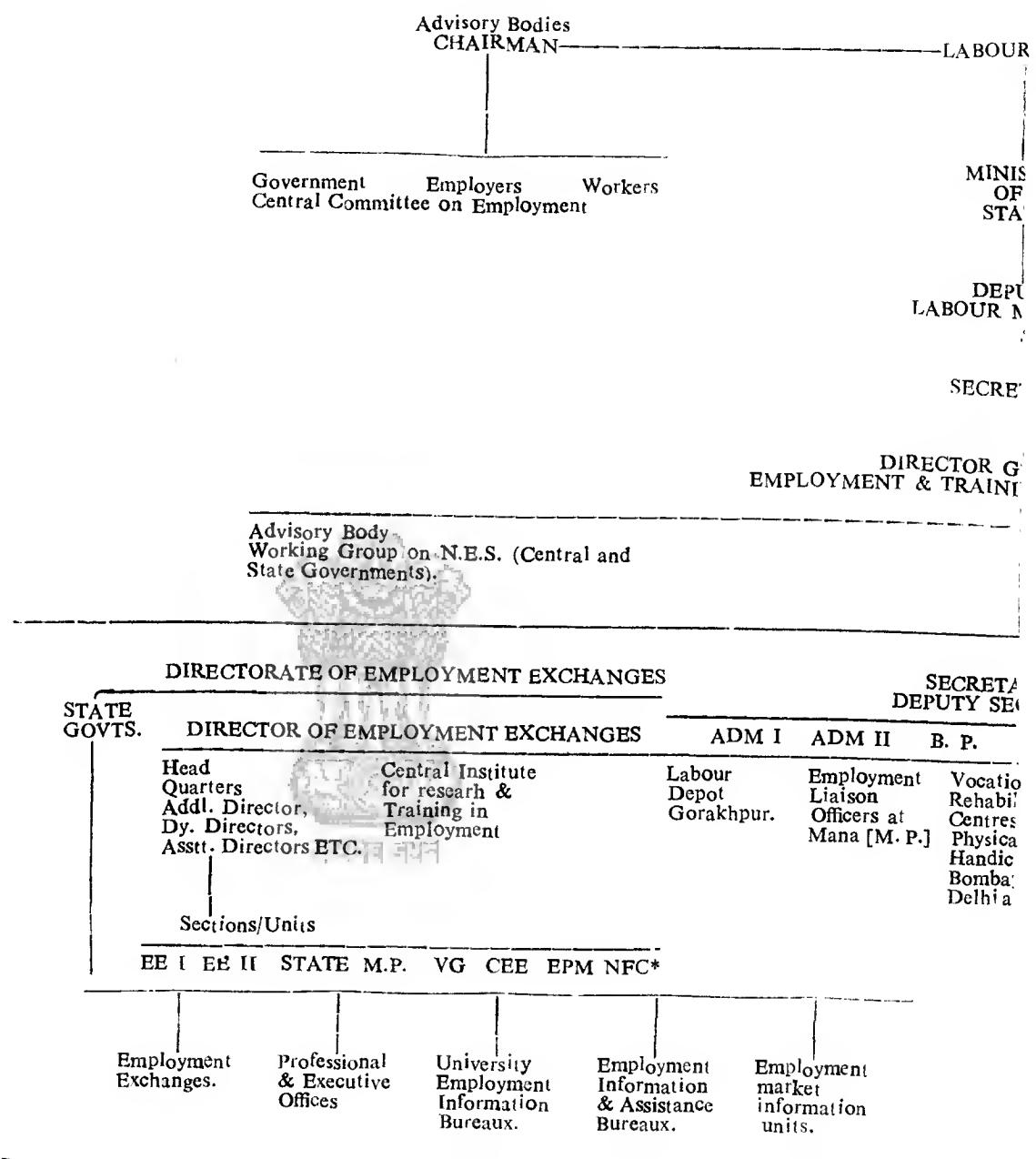




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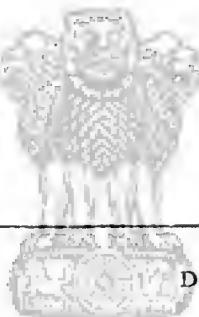
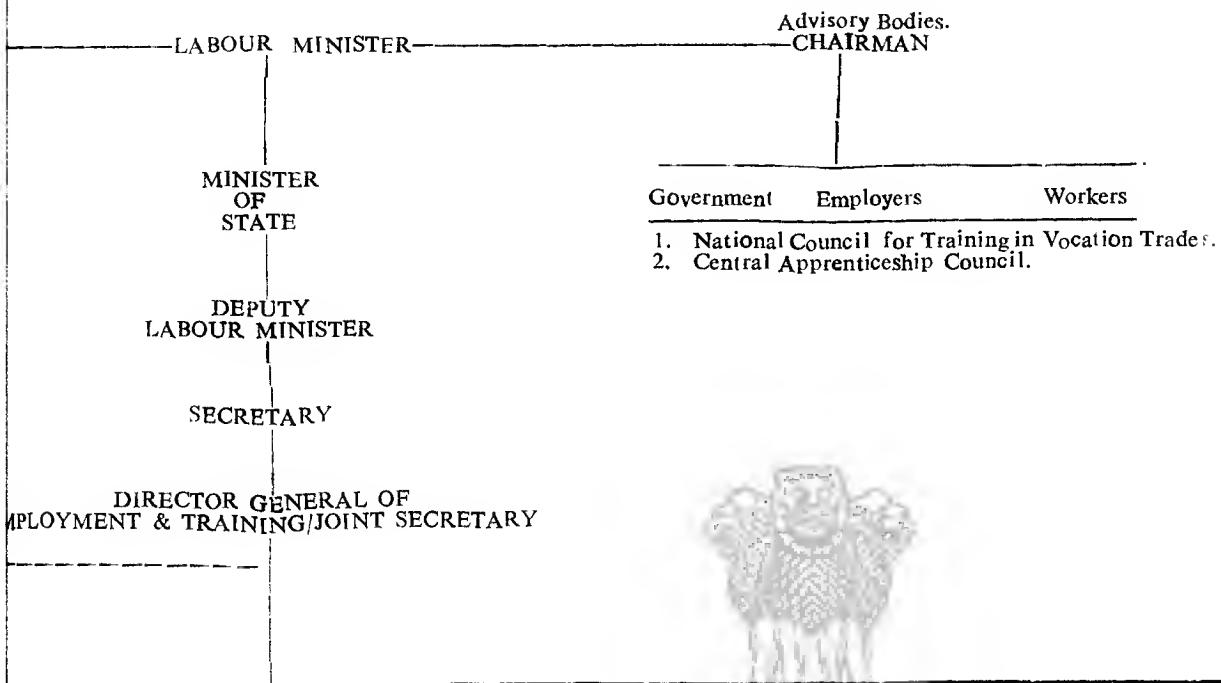
EMPLOYMENT EXCHANGES

[Compulsory Notification of Vacancies] Act, 1959.

\* National Focal Point under the Asian Manpow

**TION OF THE DIRECTORATE GENERAL OF EMPLOYMENT AND TRAINING**

(As on 1-10-1972)

**DIRECTORATE OF TRAINING**

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Employment Liaison Officers at Mana [M. P.]	Vocational Rehabilitation Centres for Physically Handicapped at Bombay, Hyderabad, Delhi and Jabalpur	Coaching cum Guidance Centres, Delhi, Madras, Kanpur and Culcutta.	Farakka Barrage Project [special cell]				STATE GOVTS.	S. T. & R. I., Culcutta.	FTI, Bang- lore.	ATI Mada- ras.		
Employment market information units.							Industrial Training Institutes.		7 Central Institutes for Instructors.			
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LAWS ADMINISTERED ON THE TRAINING SIDE:— APPRENTICES ACT, 1961.

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## APPENDIX-II

### Planning Commission—Labour and Employment Division

#### 1. Functions :

The functions of the Labour and Employment Division broadly fall into two groups — (a) Employment, (b) Labour and Labour Welfare. The details are as follows :—

##### (a) *Employment* :

- (i) Making analytical studies of employment and unemployment situation in the country and in various States from time to time;
- (ii) Preparation of research papers designed to help formulation of Employment Policy in various Five Year Plans;
- (iii) Undertaking Studies on technical manpower in order to meet specific and periodic requirements of the Commission ;
- (iv) Preparation of Chapters on Employment regarding Annual and Five Year Plans and the progress reports on the Plans;
- (v) Participation in various inter-ministerial meetings and other discussions relating to assessment and building up of sources of employment and manpower data;
- (vi) Follow-up work on the Report of the Committee of Experts on Unemployment estimates (Dantwala Committee) and the Advisory Committee of Economists on Employment Studies ; and
- (vii) Servicing the Task Force on Employment Matters.

##### (b) *Labour and labour welfare* :

- (i) Formulation of labour policy and programmes and subsequent assessment of their working;
- (ii) Examination on a continuing basis of policies, programmes, procedures, etc. which are proposed by the Ministry of Labour and Employment or various consultative agencies set up by it;
- (iii) Evolution of guidelines for the information of the Ministry/State Governments which should form the basis of framing of long-term policies in this field;
- (iv) Maintain Liaison with the Ministry and its attached offices with a view to keeping the Commission informed of important developments taking place in this sector and their likely impact on the implementation of the Plans;
- (v) Convey Planning Commission's views on different aspects of Labour Policy and Programmes which come up for frequent discussions in tripartite bodies like the Indian Labour Conference and on matters of legislation;
- (vi) Study and analysis of the reports, conventions and Recommendations of the International Labour Organisations ;
- (vii) Servicing the Task Force on Industrial Relations.

## **2. Organisation at the headquarters :**

The Labour and Employment Division comprises of two units (a) Employment, (b) Labour and Labour Welfare. The Division is headed by a Director and consists of the following officers:—

1. Director
2. Senior Research Officers
3. Research Officers &
4. Other supporting Staff

There is no field organisation so far as this Division is concerned. However, there are a number of other agencies which provide data and reports to the Division for its study of the issues referred or entrusted to it by the Planning Commission.

## **3. Procedure of work :**

The Division receives periodical reports from the Central and State agencies having relevance to its sphere of work. In addition to these reports, the Division collects some supplementary data which are necessary for its purpose.



## APPENDIX - III

### Employment and Manpower Cell, Cabinet Secretariat

#### 1. Functions and scope of work :

Coordination of work relating to employment and manpower planning. While the extent of functions of the Cell has not formally been spelt out, the work presently being done is mainly of the following three categories:

(a) Watching progress of implementation of various employment oriented schemes, identifying major problems of policy and coordination and taking action to see that the difficulties are removed.

(b) Identifying areas of activities where employment oriented schemes could be formulated, and preparing broad schemes which could be suggested to the concerned Ministries/Departments.

(c) Evolving, in coordination with the Department of Statistics and other Departments of the Government of India, pilot studies designed to improve the collection of employment and manpower statistics.

#### 2. Organisation at the headquarters :

The Cell is headed by the Employment Commissioner and Secretary to the Government of India and consists of one Deputy Secretary, one Section Officer, two assistants and some other staff. There is no field organisation under the Employment and Manpower Cell. The information is collected through the Ministries, Departments at the Centre who are administratively responsible for implementing various employment-oriented schemes.

#### 3. Coordination with similar other organisations :

Employment Commissioner is kept acquainted with the work being done in other similar organisations as—

- (i) he is Secretary, Department of Statistics.
- (ii) he has been nominated as a member of the Central Committee on Co-ordination of Employment and Rural Development set up in the Planning Commission.
- (iii) he is a member of the Expert Committee on Unemployment set up in the Ministry of Labour and Employment.
- (iv) he is a member of the General Council as well as Executive Council of the Institute of Applied Manpower Research.

#### 4. Procedure of work :

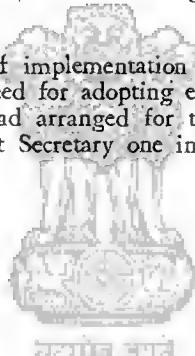
So far this Cell has been concentrating on coordination and watching the progress of the various employment-oriented schemes which are set out in the Fourth Plan document and the memorandum entitled "Towards Growth with Social Justice" presented with the budget papers for the year 1970-71. In this connection, the Cell gets monthly progress reports from concerned ministries and departments. These reports are consolidated and submitted for information to the Cabinet. Besides, watching the progress, an attempt is also made to identify problem areas with regard to these schemes and whenever

necessary, action for filling up any policy gap or gaps in the mechanics of implementation is taken by arranging discussions between Departments concerned and putting up papers to the Secretaries Committee and the Cabinet.

##### **5. Type of data collected :**

The Employment & Manpower Cell, in coordination with the Department of Statistics, Planning Commission and other data collecting agencies is trying to build up a programme for collecting statistics which would give a better picture of the unemployment problem and manpower position. Based on the recommendations made by the Committee of Experts headed by Prof. Dantwala, which had been appointed by the Planning Commission to look into the unemployment estimates, as well as the comments on this report received from various ministries and departments, a number of studies have been recommended which, if taken up, would yield a better picture of the problem. An Inter-departmental Technical Committee, headed by the Employment Commissioner, had examined the question of taking up these studies and submitted its report to the Planning Commission. The Planning Commission discussed the matter in a meeting of Economists and in pursuance of these discussions has set up a Committee of Direction (Advisory Committee of Economists on Employment Studies) to advise on the question of taking up suitable studies in various fields. The Committee of Direction has so far held three meetings and is making suitable recommendations.

To review the progress of implementation of various employment-oriented schemes and to impress the need for adopting effective measures to solve unemployment problem this Cell had arranged for two Conferences of Chief Secretaries convened by the Cabinet Secretary one in June, 1970 and the other in April, 1971.



## APPENDIX-IV

### Directorate of Manpower, Ministry of Home Affairs.

#### 1. Functions & scope of work :

- (i) To formulate, in consultation with the appropriate Ministries and Planning Commission, the basic policies and programmes in matters relating to manpower and employment;
- (ii) to secure implementation by the agencies concerned of the decisions of the Cabinet on manpower planning and organisation;
- (iii) to maintain liaison with the various Ministries of the Centre concerned with the manpower problems, the Planning Commission and other bodies and organisations, academic and governmental, and with the State Governments;
- (iv) to coordinate matters relating to requirements of technical personnel for the Defence Services and Defence Production;
- (v) to provide the Secretariat for the Technical Manpower Committee and the Central Manpower Board;
- (vi) to function as the administrative Ministry in respect of the Institute of Applied Manpower Research;
- (vii) to deal with policy matters relating to the Scientists' pool, the scheme of super-numeracy posts; and other schemes concerning "Brain-Drain";
- (viii) to function as the Manpower Division of the Planning Commission in the field of Manpower Planning.

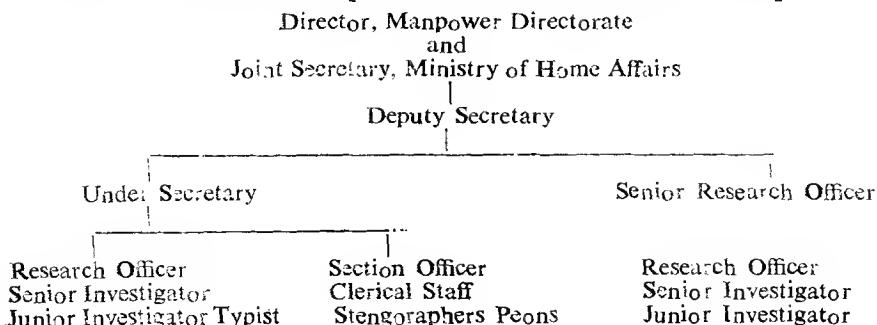
#### 2. Organisation at the Headquarters :

The Directorate consists of the following officers/posts :—

- (i) Director and Joint Secretary to the Government of India.
- (ii) Deputy Secretary.
- (iii) Under Secretary.
- (iv) Senior Research Officer.
- (v) Research Officers—2.
- (vi) Section Officer—1.
- (vii) Senior Investigators—5.
- (viii) Junior Investigators—2.
- (ix) Clerical staff, stenographers, etc.

Organisation chart is given below :

#### ORGANISATIONAL STRUCTURE OF THE DIRECTORATE OF MANPOWER [MINISTRY OF HOME AFFAIRS]



### 3. Field organisation :

The Directorate of Manpower has no regional or field offices. However, each State Government and Union Territory has designated a senior officer from its organisation as the Manpower Officer with whom the Directorate of Manpower keeps contact on matters concerning manpower. A close coordination exists between the Directorate of Manpower and the manpower cells in the States where these exist. The setting up or reinforcement of State manpower cells in the States is under consideration in the context of strengthening of State planning organizations.

### 4. Coordination with other organisations :

(i) The Directorate of Manpower functions concurrently as the Manpower Division of the Planning Commission and assists the Planning Commission in assessing manpower requirements for the Plans. In its capacity as Manpower Division of the Planning Commission, it has set up six Working Groups in connection with the formulation of the Fifth Five year Plan in respect of engineering, medical, agricultural, teaching, scientific and managerial manpower. These Working Groups function under the overall guidance of the Steering Group on Manpower and Employment. The secretariat for the Steering Group and Working Groups is provided by the Directorate of Manpower.

(ii) It collaborates with the other divisions of the Planning Commission through its membership of the working groups for different sectors like education, employment, agriculture, health and family planning, etc.

(iii) The coordination with other ministries is done through the medium of a steering group on manpower constituted in 1965 with Director, Manpower Directorate as the convener.

(iv) The Directorate is represented on a number of technical committees like All India Council of Technical Education, Central Committee on Employment, Joint Board of Mining, Engineering, Education & training of the Ministry of Education, Special Recruitment Board for the pool of Scientists and Technologists.

### 5. Procedure of work :

(i) The Directorate maintains liaison with the States through the visits of the officers of the Directorate to the State Governments and through conferences of States Manpower Officers.

(ii) Consultation service to the State Governments for design of surveys and studies.

(iii) Analysis of reports/studies/results of surveys in the field of manpower conducted/proposed to be conducted by the State Governments, Director General of Employment and Training, the Institute of Applied Manpower Research and other Central Ministries with a view to initiation of steps for the clarification of concepts and improvement of the surveys/studies etc.

(iv) In collaboration with the Institute of Applied Manpower Research, assist the State Governments in training of officers in manpower planning techniques.

(v) Association with Steering Group, Working Groups and Task forces set up by the Planning Commission in various sectors, such as education, industry, agriculture, irrigation and power etc. to assist them in drawing up manpower requirements for the plans.

## MANISATION IN INDIA

### THE CABINET

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### Ministries

Formulation and implementation of recruitment  
and training programmes relating to their field of  
activity.

### Ministry of Education

Development and adaptation of the educational  
system to meet the manpower requirements.

### Ministry of Labour & Employment

1. Administration of national system of employment exchanges.
2. Administration of national system of craftsmen and industrial training including apprentices.
3. Conduct of labour market and occupational studies.

### Ministry of Food and Agriculture, Community Development and Cooperation

(Department of Agriculture)

Agricultural and allied personnel, Community  
Development, Panchayat, Cooperation & allied  
extension personnel.

### Council of Scientific & Industrial Research

1. Maintain the National Register of Scientific and technical personnel.
2. Administer the Pool of Scientists and Technologists.

Different State Departments  
Formulation and implementation of  
recruitment and training programmes  
relating to their field of activity.

## MANPOWER ORGANISATION

CENTRAL CABINET

## Planning Commission

Generally responsible for formulation of the National Development Plan and perspective of future growth of the economy.

Directorate of Manpower  
(Ministry of Home Affairs)

1. Secure implementation by the agencies concerned of the decisions of the Cabinet on manpower problems.
2. Co-ordination of manpower policies and programmes in close collaboration with the Planning Commission and the Council of Scientific & Industrial Research.
3. Liaison with the various Ministries and other agencies at the Centre concerned with manpower problems and the States.
4. Function as Manpower Division of the Planning Commission.

Institute of Applied  
Manpower Research

1. To advance knowledge of human resources, provide broad perspective and develop improved methods for dealing with manpower problems.
2. Provide manpower research services to Government Departments, etc.
3. Training in professional techniques for manpower planning.

## State Cabinet

## State Manpower Officers

Coordination of manpower activities at the State level.

## APPENDIX- V

### Institute of Applied Manpower Research

#### **1. Function and scope of work :**

- (i) To advance knowledge about the nature, characteristics, and utilisation of human resources in India;
- (ii) To provide a broad perspective of requirements of trained manpower for economic development in different fields with due regard to the probable impact of technological changes on the pattern of employment;
- (iii) To develop improved methods and techniques for dealing with :—
  - (a) training and development of the existing work force;
  - (b) educational preparation for employment;
  - (c) vocational guidance;
  - (d) identifying and developing highly talented persons;
  - (e) forecasting demand and supply of manpower and connected matters;
- (iv) To provide manpower research services to Government Departments, public corporations and private establishments;
- (v) To undertake, organise and facilitate study courses, conferences, lectures, seminars and the like to promote the aforesaid objectives;
- (vi) To undertake and provide for publication of journals, research papers and books and to establish and maintain libraries in the furtherance of the aforesaid objects;
- (vii) To cooperate with international agencies engaged in manpower research and arrange for inter change of personnel, materials and data;
- (viii) To stimulate interest in manpower problems generally, and to co-operate with and assist manpower research by other agencies and institutions or professional associations; and
- (ix) To provide advanced training in professional techniques for manpower planning and administration.

#### **2. Organisation at the headquarters :**

The Union Finance Minister is the President of the Institute. The General Council of the Institute has representatives of various Central Ministries, State Governments, Research Institutions and Employers and Trade Union Organisations. The Institute is administered by an Executive Council headed by the Cabinet Secretary. The research work taken up by the Institute is decided upon and periodically reviewed by a Standing Committee on Research Programmes. Besides the Director and the Joint Director, the staff of the Institute can be broadly allocated into four important areas of work *viz.*, (a) Research, (b) Training, (c) Consultancy, and (d) Supporting Services, *e.g.*, Library and Documentation Services, Publications and Administration.

The Research work is done in three Divisions *viz.*, Manpower Dynamics Division, Manpower Resources Division and Manpower Economics and Statistics Division each headed by a Project Leader—a Chief. A number of researchers comprising of Sr. Economists, Sr. Research Officers, Research Officers, Research Assistants/Investigators from the complement of staff attached to various Divisions.

### 3. Field organisation :

The Institute has no field organisation of its own. The research work done in the Institute draw heavily on the existing published and unpublished data. Nevertheless the Institute has undertaken some surveys with the assistance of Central/State Governments and other field agencies. The Institute has also hired temporary field staff (mostly college students) for specific studies.

### 4. Coordination with similar other agencies :

(i) The Central Council of the Institute has on it representatives of various Central Ministries, State Governments, research institutions and employers and trade union organisations.

(ii) Much of the Institute's work is taken up on an indication of some need by the Central Ministries, State Governments, the Planning Commission or public undertakings.

(iii) The Institute is considered to be a common service agency available to these organisations.

### 5. Procedure of work :

(i) The project work of the Institute starts on an indication of the need from a consumer agency.

(ii) A small technical group is constituted to specify the problem and to determine the method of dealing with it.

(iii) After the specification of the problem, the relevant literature on the subject is collected and reviewed.

(iv) The gaps in the information are filled through collection of data on an *ad hoc* basis either through the appointment of field investigators or through the good offices of an existing agency.

(v) The findings of the enquiry are submitted to the agency concerned and published for general information.

### 6. Type of data collected and analysis carried out :

The following studies indicating type of data collected and the analysis carried out are conducted by the Institute :—

(i) A detailed study of the requirements of civil engineering personnel in the public sector including a detailed study of the long term demand and supply position.

(ii) A study on the availability and requirements of metallurgists.

(iii) A detailed study of the educational and training preparation of technicians.

(iv) A detailed analysis of functions, fields of activity and typical job positions in industry with a view to assisting the identification of technicians' speciality.

(v) A study of the present unemployment situation among engineers and the long term prospect.

(vi) An agricultural manpower survey in the States of U. P. and Maharashtra in 1967 to determine the characteristics of the existing stock of

agricultural personnel, the time utilisation, employment opportunities for selected categories and wastage in agricultural education.

- (vii) A number of studies on the stock of doctors, nurses, dentists, post graduate medical education and manpower requirements of the family planning programme.
- (viii) A study on the nature and type of manpower planning carried out in public sector undertakings.
- (ix) A study to evolve a suitable methodology for forecasting the requirements of the officers of the Indian Administrative Service.
- (x) A study of migration of qualified personnel from India through a detailed analysis of passports issued during 1960-67.



APPENDIX- VI  
Council of Scientific and Industrial Research

**1. Functions :**

- (i) Promotion, guidance and coordination of scientific and industrial research including the institution and the financing of specific researches;
- (ii) Establishment or development of and assistance to special institutions or departments for scientific study of problems affecting particular industries and trades;
- (iii) Utilisation of the results of the researches conducted under the auspices of the council towards the development of industries in the country;
- (iv) Establishment, maintenance and management of laboratories, workshops, institutes and organizations to further scientific and industrial research and to utilize for purposes of experimentation or otherwise any discovery or invention likely to be of use to Indian industries;
- (v) Collection and dissemination of information in regard to research and industrial matters generally; and
- (vi) Publication of scientific papers and journals.

**2. Organisation at the headquarters :**

*(i) The Society of the Council of Scientific and Industrial Research :*

*Industrial Research.*—The Prime Minister is the *ex-officio* President of the society, the Minister-in-charge the *ex-officio* Vice-President, and Members of the Governing Body and any other person or persons appointed by the Government of India are members. The Director General, Scientific and Industrial Research, Cabinet Secretariat is the Principal Executive of the society.

*(ii) Governing body :* Prime Minister is the President. The Union Minister in-charge of the Department of Scientific and Industrial Research and Electronics is the Vice-President. It further includes the representatives of the administrative Ministries and Ministry of Finance, the Director General Scientific and Industrial Research and two elected members, all donors of sums of rupees 5 lakhs or more, a nominee of the firm or institution which has donated Rs. 25 lakh or more and one or more members appointed by the Government of India.

*(iii) Board of Scientific and Industrial Research :*

The Board is advisory to the Governing body. It is comprised of scientists, industrialists and persons drawn from Government departments concerned with industrial research.

The Board is assisted by Research Committees dealing with different scientific and engineering disciplines.

*(iv) The executive :*

The Director General, Scientific and Industrial Research who is also Secretary to the Govt. of India, is the principal executive officer. He is assisted by a number of administrative and technical divisions by establishment, Works and

**Purchase, Budget, Research, Survey and Planning, Scientific and Technical Personnel, Research Coordination and Industrial Liaison, Grants-in-aid, Patents and Process Establishment.**

### **3. Procedure of work :**

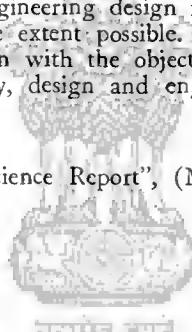
Of the above divisions the Scientific and Technical Personnel Division deals with manpower. The division maintains a roster on the qualifications, experience and availability of scientists, engineers, technologists and medical personnel in the country. The division carries out manpower research to study the general and specific characteristics of the personnel in various disciplines and their utilization and wastage. The Division maintains a National Register of Scientific and Technical Personnel. It contacts individuals either through advertisement in the paper or through census or through employers directly. The CSIR collaborated with the census (1971) in conducting a special census of scientific and technical persons.

The Research Survey and Planning Division is concerned with Surveys of scientific research with special reference to operational research, socio-economic aspects of science and scientific research.

The Process Evaluation Cell undertakes the techno-economic evaluation of processes and products developed by CSIR laboratories. It also functions as consultant in order to provide engineering design feasibility and project reports to the national laboratories to the extent possible. The Cell also scrutinizes applications for foreign collaboration with the objective of utilizing indigenously available know-how, technology, design and engineering facilities, etc.

### **4. Publications :**

The Council publishes "Science Report", (Monthly), "Vigyan Pragati" and books on science subjects.



## APPENDIX-VII

### Ministry of Education and Social Welfare

#### 1. Functions :

Although Education is a State subject, Government of India is responsible for the coordination of educational facilities and determination of standards in respect of higher education and research and scientific and technical education.

#### 2. Organisation :

For the effective performance of its consequential responsibilities the Government of India has a fulpledged Central Ministry of Education and Social Welfare. The Ministry has two Departments: (1) Department of Education and (2) Department of Social Welfare. The Ministry is headed by a Minister of State who is assisted by two Deputy Ministers.

The Secretariat of the Department of Education consists of a number of Divisions dealing with various aspects and levels of education. Notable Divisions among these which are concerned directly or indirectly with the manpower are University and Higher Education Division, Technical Education Division, School Education Division and Statistics & Information Division.

#### 3. Procedure of work :

The University Education Division is concerned with the Central Universities and coordination and maintenance of standards of higher education.

The Technical Education Division is concerned with the planned and co-ordinated development and the maintenance of quality and standards in the field of Technical Education. In discharging its functions the Technical Division is assisted by the All India Council for Technical Education, an advisory body set up by the Government. The Council functions through four regional Committees located at Kanpur, Calcutta, Madras and Bombay. Besides administering institutions directly established by the Central Government for higher technical education and research like the Institutes of Technology, Institutes of Management and specialised institutions like School of Planning and Architecture, National Institute for Training in Industrial Engineering, this Division plans for the intake and out-turn of technical personnel at different levels and stages of technical education.

The School Education Division is largely responsible for advising the State Governments and Union Territories on matters relating to qualitative improvements at the primary and secondary stages of education through centrally sponsored schemes and by giving grants for various crash programmes undertaken by the State Governments in the field of School Education.

The Statistics & Information Division of the Ministry collects educational statistics in detail on prescribed forms from the State Governments and Universities in respect of recognised educational institutions, from pre-primary stage upto the higher educational stage. Besides collecting and consolidating the statistical information on all-India basis, the Statistics and Information Division performs the functions of a clearing house of statistical information in the country by publishing various types of statistical publications. It also undertakes specialised analytical studies on various aspects of education.

**4. Type of data collected :**

The Information and Statistics Division collects all types of educational statistics including *inter-alia* the number of educational institutions (both urban and rural), the number of students studying in different types of educational institutions as well as at different stages of education, the number of teachers (both by qualifications and by type of institutions), expenditure incurred on various types of educational institutions (both by management and by sources of income), and other relevant data about educational facilities for Scheduled Castes and Scheduled Tribes etc.



## APPENDIX- VIII

### Office of the Registrar General and Census Commissioner for India

#### 1. Functions :

The Census Organisation aims at providing the most comprehensive information about population and its demographic and socio-economic characteristics. Its functions include the following :—

- (i) Decennial count of population and collection of information pertaining to demography.
- (ii) Census of the houses, their construction and utilisation.
- (iii) Census of the manufacturing, trading and other servicing establishments—sector in which it works, size of employment, nature of business performed etc.
- (iv) Collection of vital statistics for providing vital rates of births and deaths and cause of death etc.
- (v) Conducting social studies based on information about the life and culture of people and impact of economic development.
- (vi) Compilation of data regarding mother tongue, bilingualism, and regional languages etc.
- (vii) Publication of Census and other population data.

#### 2. Organisation at the headquarters :

The Registrar General, India and Census Commissioner is the head of the organization. He is assisted by three Deputy Registrars General—one each in charge of Census, vital statistics and social studies with other officers and staff as follows :—

Division	Officers
(i) Census	
(a) Administration	Central Tabulation Officer (1)
(b) Central Tabulation	Assistant Tabulation Officer (1) Research Officer (1)
(c) Mechanical tabulation	Asstt. Registrar General (1). Mechanical Tabulation Officers (2).
	Asstt. Tabulation Officer (1) Senior Programmer (1).
(d) Geographic & Cartographic	Map Officer (1). Research Officer (2). Programmers (3).
(e) Language Divisions	Asstt. Registrar General (1) Linguist (1).

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(ii) Social Studies .		Officer on Special Duty (1) Research Officer (3).
(iii) Vital Statistics . (a) Vital Statistics (St - tutory Registration.)	Asstt. Registrar General (1) Asstt. Central Tabulation Officer (1).	Asstt. Director of Census Operations (1).
(b) Vital (Sample Registration).	Statistics Senior Research Officers (2)	Research Officer (3). Asstt. Directors (2).
(c) Sampling, Demography and Training.	Asstt. Registrar General (1)	Senior Research Officer(1) Research Officers (1) Asstt. Director (1).
(d) Research Unit		Research Officer (1).

### 3. Organisation in the field :

(a) For census operations and social studies in each State and Union Territory an officer is appointed as Director of Census Operation with a Deputy and/or an Asstt. Director. These are whole time officers appointed two years prior to the census operation.

In districts, the District Collector or Planning Officer is designated as District Census Officer for the duration of census. He performs duties relating to Census in addition to his normal duties, with part time officers for Talsil, Taluk or Thanas and towns. Similarly in each village and town enumerator blocks are formed and enumerators are appointed from amongst Patwaris, school teachers or other clerical staff of town area offices to conduct the enumeration and connected work. For 1971 census about a million enumerators, 2,00,000 supervisors, a large number of census charge officers, over 350 district census officers (all part time workers) and 27 Asstt. Directors, 108 Deputy Directors and 29 Directors were appointed.

For tabulation of data, Regional Tabulation Offices were set up under the charge of Deputy Directors of Census Operations.

(b) For social studies, investigators were appointed under Deputy Director Census Operations.

(c) *Staff for vital statistics.*—Under the Registration of Births and Deaths Act, 1969 the municipal and town area authorities in the urban area and Panchayat authorities or village administrative authorities are authorised to register the information provided by the residents of the area relating to vital events.

Under the Sample Registration Scheme for which 150 villages and 60 to hundred Blocks have been selected in each State on random sample basis, part

time enumerators have been appointed in the sampled areas to collect information.

Model Registration Scheme is also in operation under which para-medical staff are appointed to investigate into the causes of deaths. The staff are appointed on part-time basis from amongst the officials of the Primary Health Centres.

#### **4. Procedure of work & type of data collected :**

##### **(a) Census :**

For census, the entire country is mapped out from the major administration division of a State down to every village in rural areas, and towns. Bigger villages and towns are sub-divided into wards and blocks. Each house is numbered and listed. Demographic details are collected about each person found in the house-holds. In the Census, data are collected regarding demographic, characteristics, economic activities, migration particulars, religion, literacy, mother tongue and languages known.

Data are also collected about industrial establishments, the type of activity performed, size of employment and power used or not. Data collection is done by interview method.

##### **(b) Social studies :**

Social studies are based on Census Data or on small specialised Surveys. For example, in 1961 census socio-economic survey was conducted in 500 and odd villages. In 1971 Census about 200 towns have been selected for special study besides taking up resurvey of some selected villages previously covered to reflect the changes. Ethnographic Survey of the Scheduled Castes and Tribes is also being undertaken.

(c) The organisation runs a countrywide system of registration of births and deaths under legal provisions. The vital statistical data are the result of the routine returns of registration system. *Ad-hoc* studies are also carried out.

#### **5. Analysis carried out :**

Apart from publishing a series of Tables built up from the Census data, detailed analytical reports are also brought out. Other reports covering special studies, special area surveys, linguistic surveys, post enumeration checks, age tables, life tables, estimates of inter census birth and death rate and vital statistics etc. are also published.

## APPENDIX—IX

### National Sample Survey Organisation

#### 1. Functions :

- (i) To obtain comprehensive and continuing information relating to social, economic, demographic, industrial and agricultural statistics through sample surveys on a country-wide basis.
- (ii) To provide technical guidance to the States in planning and organizing the State series of crop estimation surveys, participate in the supervision of field work of these surveys and coordinate the survey results.

#### 2. Organisation at the headquarters :

(i) The Government Council of NSSO consists of fifteen members including the Chairman, who is a non-official. Four of the members are economists and statisticians and ten from within the Government including two Directors of State Statistical Bureaus.

(ii) The NSSO has four Divisions :

- (a) Survey, Design and Research.
- (b) Field Operations.
- (c) Data Processing.
- (d) Economic Analysis.

Each of the Divisions has a Director as its head. All the Divisions function under the overall direction of the Chief Executive Officer. At present the first three divisions are existing and the formation of the Economic Analysis Division is under way.

The Field Operations Division has three Wings :

- (i) The Socio-Economic Wing.
- (ii) The Agricultural Statistics Wing.
- (iii) The Industrial Statistics Wing.

*The socio-economic wing* is entrusted with the field work of multi-purpose and integrated National Sample Survey conducted in rounds, a round covering several topics but with emphasis on one or two of these during a specified period generally coinciding with the agricultural year. The 26th round is at present in progress and has been designed to collect data on Debt and Investment at the instance of the Reserve Bank of India and on Land Holdings to fulfil the commitment of the Ministry of Agriculture to the Food and Agricultural Organisation of the United Nations for the participation in the World Agriculture Census, 1970. The 27th round is ear-marked for studying the Employment and Unemployment situation in the country. Some data on employment and unemployment situation among the 'weaker sections of population in rural areas' was collected during the 25th round, 1970-71.

*The agricultural statistics wing* is responsible for providing the technical guidance to the States in planning and organising the State series of crop estimation

surveys. The programme of this Wing is in the process of reorientation such that apart from its regular work mentioned above, it will also take suitable steps to fill in gaps still existing in agricultural statistics and evolve methodology in the field unexplored so far but considered important from the view point of agricultural development.

*The industrial statistics wing* carries out the field work of the annual survey of industries (ASI), the Director, Field Operations Division being the Statistics Authority under the Collection of Statistics Act, 1953 which is invoked for the conduct of the ASI. The field work of the current survey—ASI 1970—was started in August, 1971.

### 3. Organisation in the field :

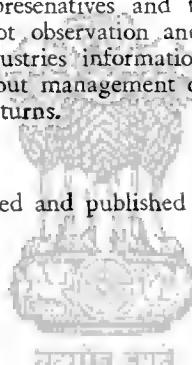
The Field Operation Division has regional offices in different States to organise the field work. The work in each State is done under the control of an Assistant Director who is assisted by Superintendents and requisite field staff.

### 4. Procedure of work :

Data on socio-economic enquiries are collected from the households by interrogating the household representatives and those on land utilization and crop cutting experiments by spot observation and actual measurements. In regard to Annual Survey of Industries information is sought to be collected through mailed questionnaires, but management of factories often seek guidance of NSS officials to fill in the returns.

### 5. Publication of reports :

Technical reports are prepared and published on different surveys.



## APPENDIX-X

### Central Statistical Organisation

#### 1. Organisation :

The work relating to manpower and employment in the CSO is looked after by the Manpower Research Division consisting of a Deputy Director, an Assistant Director, two Investigators working under the guidance of a Joint Director.

#### 2. Functions :

(i) Standardisation and coordination of statistics in the fields of labour and manpower, education and scientific research.

(ii) Close liaison is to be maintained with the concerned agencies at the Centre like the Planning Commission, DGET, Labour Bureau, Institute of Applied Manpower Research, Directorate of Manpower, Ministry of Education, Council of Scientific and Industrial Research, etc.

(ii') To attend to references received from time to time from different States in any of these matters.

(iv) Preparing of the estimates of employment in insurance and banks after collecting the necessary data from the concerned agencies.

#### 3. Coordination :

CSO is generally represented on conferences, committees and working groups, dealing with the subject of employment and Manpower Planning in the different agencies of the Government of India, for example, the working groups of the Planning Commission, the Central Committee on Employment, etc.

#### 4. Procedure of work :

The work relating to standardisation of concepts and definitions is carried out through inter-departmental or inter-Ministerial working groups with representatives from States and research organisations.

The trial of standardised concepts and definitions is carried out through the field agency of National Sample Survey Organisation.

## APPENDIX-XI

### Recommendations of the ILO and Experience in Other Countries

Apart from an examination of the organisation and functions, etc. of the agencies of the Government of India which deal with manpower planning and employment in its present diverse position, the Panel collected information about other countries on the experience in dealing with this subject and the type of organisation have evolved. Broadly, the material looked into includes the activities of the International Labour Organisation in this regard and the organisational set up for the purpose in different countries including USA, Canada and UK. The Panel's observations in this behalf are summarised below:—

In 1961, the International Labour Organisation considered the question of suitable machinery for manpower planning activities as a part of the economic and social development. The issues considered at that time are very pertinent to the subject under discussion. Therefore some of the points are brought out in the following paragraphs.

While discussing the administrative organisation for manpower planning, it was noted that the international standards covering the administrative organisation of manpower have not been formalised *per se*. However, in countries in which manpower planning has been carried out as a part of economic and social development planning, there has been a tendency to evolve patterns of administrative organisation with certain common features. In some cases these patterns have come about after experimenting with a series of reorganisations. To this extent the international experience could be of use in evolving a suitable organisation in India.

ILO recommendation Nos. 83, 88, 113 and 122 dealing with allied subjects include paragraphs which are relevant to the subject of organisation for manpower planning. The following extracts from these recommendations/conventions are note-worthy:—

- "(1) Employment policy should be coordinated with, and carried out within the framework of overall economic and social policy, including economic planning or programming in countries where these are used as instruments of policy" Recommendation (No. 12) II 6 (1).
- (2) Representatives of employers and workers and their organisation should be consulted in formulating policies, for the development and use of human capacities, and their cooperation should be sought in the implementation of such policies, in the spirit of the consultation (Industrial and National Levels Recommendation, 1960") Recommendation (No. 122) II 3.
- (3) The employment service shall be so organised as to ensure effective recruitment and placement, and for this purpose shall take appropriate measures to collect and analyse, in cooperation where appropriate with other authorities and with management and trade unions, the fullest available information on the situation of the employment market and its probable evolution, both in the country as a whole and in the different industries, occupations and areas, and make such information available systematically and promptly to the public authorities, the employers' and workers' organisations concerned and the general public, "Convention No. 88, Article 6 (c)".

- (4) In order to facilitate the best possible organisation of the employment market as an integral part of the national programme for the achievement and maintenance of full employment and development and use of productive resources, and annual national manpower budget should be drawn up, as soon as practicable, as a part of a general economic survey; (Recommendation No. 83, III).

In the context of devising a machinery for manpower planning and employment, the following general principles were emphasised.

1. The administrative functions are generally divided into two types, namely "line and staff". The former is essentially a directive function, while the latter is an advisory function. A line function is operational in character and entails decision making and command. It obviously occurs where there is a chain of command running from the head of a department to the remotest field office, although it is not limited to large organisations. The purpose of the line function is to bring out action directly. In contrast, a staff function relates to the research, analysis and planning and to giving advice to officials who have line functions. Staff work may also include coordination of ideas, their communication and negotiations. The purpose of the staff function is to assist the line officer in decision making.

2. A new organisational unit needs to be established to carry out new functions only when an existing body cannot perform the work or cannot do so in a sufficiently comprehensive manner.

3. Components of an institution need to be established at levels in the administrative hierarchy which are commensurate with their responsibilities.

4. Manpower planning cannot be disassociated from production and investment plan, because manpower planning is intended to influence the quantity and quality of human resources available for production. Therefore, it must be related to production objectives and also it requires a certain amount of investment.

5. Estimation of manpower and employment requirements for development has limited and passing value if only done on *ad hoc* basis.

6. The technical support required for manpower planning calls for a structure that provides for the free flow of technical information for use as a general framework within which to plan and as a means of testing the consistency and practicability of tentative proposals in different sectors. Thus there is need for two-way flow of information.

7. The manpower planning calls for statistical and non-statistical information about the population and the labour force. However, it does not *per se* entail the actual conduct of population Census or the carrying out of the socio-logical studies relative to employment nor does it encompass the actual analysis of occupations or the development of a system for the classification of occupations. Such activities are accepted responsibilities within the competence of existing organisations. Nevertheless, manpower planning activities are not possible without minimum essential technical material and instruments.

8. Manpower planning activities and educational planning policies merge on certain points, particularly in the study of population and population trends

and in the estimation of long term requirements for trained manpower. However, educational policy objectives do not fully coincide with manpower policy objectives. Therefore, it need not and cannot be merged together.

9. On the other hand, planning of vocational training covers relatively short periods of time and calls for an organisation that is especially responsive to the current manpower situation. Therefore, the organisational structure for manpower planning needs to forge a link between manpower planning, vocational training and employment market situation.

10. Out of the above mentioned considerations, the following minimum requirements for an effective administrative organisation emerged as pre-requisites for non-permanent central institution a staff unit responsible for continuing attention to manpower resources and requirement—global, sectoral, regional and occupational;

—this staff unit closely coordinated with similar units which deal with production and financial planning;

—a line of communication to all agencies of government having responsibilities for the collection of statistical and non-statistical data and the development of technical instruments, essential to manpower planning activities;

—a line of communication to all those principally concerned with the implementation of the manpower aspects of development plans—agencies of government and representatives of employers' and workers' organisations.

Based on these principles, an organisational structure was recommended by the ILO which is given as Appendix XII.

#### *Experience in other countries :*

In the light of the international recommendations, it is pertinent to study what has actually taken place in different countries. The information in respect of USA, UK and Canada is examined and the details thereof are given in Appendices XIII, XIV and XV respectively. A study of these three countries broadly reveals the following features :

1. The United States Employment Service manages the State Employment Service, the Territorial Employment Services, the Administrative and Social Security Act, the Employment Act, etc. The first major objective of the employment service is to assist in promoting high levels of employment and economic activity, *i.e.*, to bring together the employers and the employees, to arrange suitable workers for the jobs and *vice versa*, to make critical studies based on market information, etc. The second major objective is to assist the war veterans in obtaining gainful employment. Its functions are broadly classified as follows :

- (a) Placement service;
- (b) employment counselling and selective placement service;
- (c) Special service to veterans;
- (d) industrial services;
- (e) labour market information service; and
- (f) community participation.

In U.K., the Minister of Labour and National Service is responsible for manpower planning and employment. There are 9 departments/divisions each under an assistant secretary within the Ministry dealing with employment policy, employment service, industrial relations, military recruitments, overseas matters, safety, health and welfare of workers and factory inspectorates, statistics, training, youth employment and disabled persons.

In Canada, National Employment Service is the most important organisation under the Federal Department of Labour. Its functions include free employment service to employers and workers to ensure best possible organisation of employment market and the use of manpower. The basic principles of active manpower policy of the Canadian Government include an effective development of manpower resources to meet the requirements of growth in the economy and to meet the needs of each individual for full employment; employment policy to aim at production and freely chosen employment.

The experience of these three countries brings out clearly that there can be no set pattern of manpower planning and employment organisation which can suit all countries/or which can suit a country for all time. It will depend on many factors including the scope and coverage of manpower planning and employment, the existing government machinery and its structure and the appropriate, place for the manpower and employment machinery in it, the work relationships between the different agencies which deal with certain aspects of the manpower and employment problem, the details of the information available, the process of socio-economic development and socio-political structure of the country.



NATIONAL ECONOMIC AND SOCIAL DEVELOPMENT  
ATION OF COMPONENTS  
NPOWER PLANNING AND ADMINISTRATION

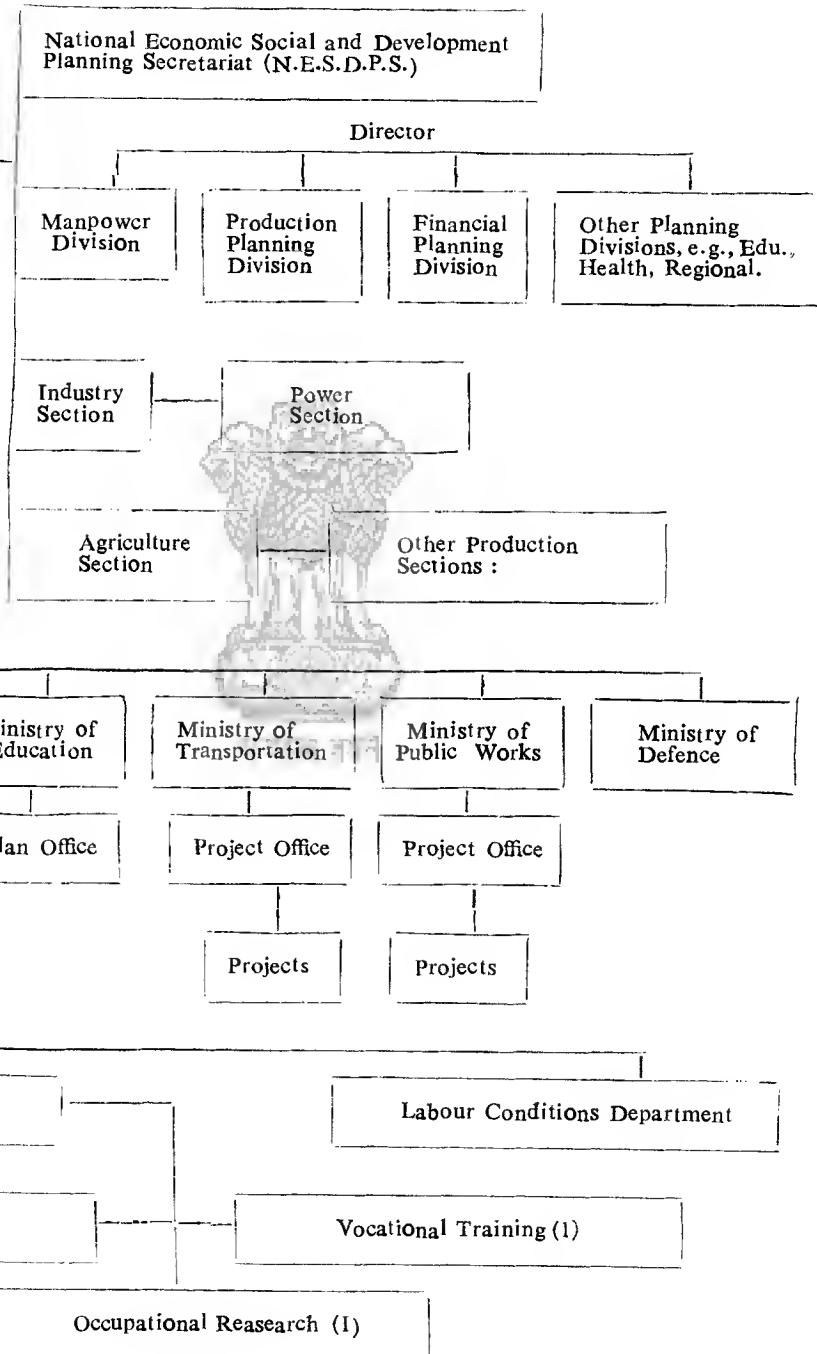
## APPENDIX—XII

Executive

board

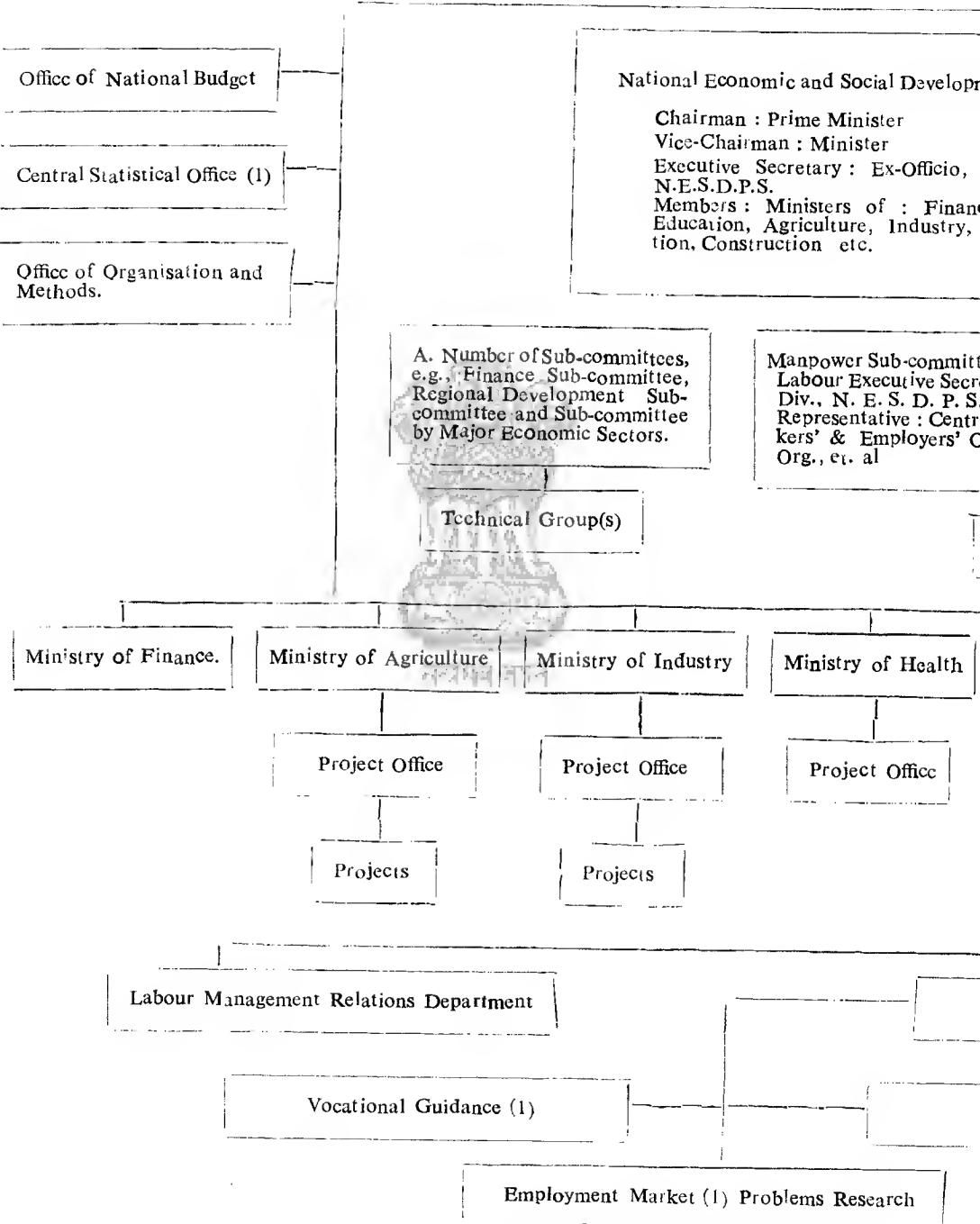
or of  
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to illustrate the planning institution of any one country although these or similar organisational

**INSTITUTIONAL FRAMEWORK FOR  
HYPOTHETICAL ORG.  
WITH PARTICULAR REFERENCE TO**



(1) Technicians on Manpower Technical Groups(s) drawn from these and similar sources.

**Note**—The purpose of this chart is to facilitate the study of organisational problems. It is not intended that all components are likely to be found wherever planning is undertaken.

## APPENDIX – XIII

### The United States Employment Service

In pursuance of the ILO Convention No. 88 and Recommendation 83, the Bureau of Employment and Security in the U.S. Government carries out detailed manpower programmes and employment service. The details of the functions, the organisation and procedures of the surveys are briefly indicated below.

#### Objectives :

The most important objective of the employment service is to assist and promote high level of employment and economic activity in the country. The second objective of the employment service is to assist war veterans in obtaining gainful employment.

#### Functions :

1. Placement service.
2. Employment counselling and selective placement service.
3. Special service to veterans.
4. Industrial services.
5. Labour market information service.
6. Community participation.
7. Maintenance and coordination of the following services :—
  - (i) State Employment Services.
  - (ii) Territorial Employment Services.
  - (iii) A national system of employment offices.
  - (iv) Veterans employment service.
  - (v) A farm placement service.
  - (vi) A public employment service.
8. Coordination of public employment offices throughout the country and increasing their usefulness by developing and prescribing minimum standards of efficiency, uniformity in administrative and statistical procedures, etc.
9. Increasing the efficiency of the service through advice in solving their local problems, by publishing information on employment opportunities.
10. Maintenance of system for clearing labour between several States.
11. Administration of the following acts :—
  - (i) The Social Security Act which envisages that employment insurance benefits may be paid to unemployment workers only through public employment offices or such other agencies as may be approved by the Social Security Act.
  - (ii) The Servicemen's Readjustment Act which envisages that veterans through public employment offices; should be provided "a maximum of job opportunity in the field of gainful employment."

(iii) The Employment Act which envisages that it is the continuing policy and the responsibility of the federal Government to use all practicable means consistent with its needs and other essential considerations of national policy, to coordinate and utilise all its plans, functions and resources for the purpose of creating and maintaining in a manner calculated to foster and promote free competitive enterprise and the general welfare, conditions under which they will be afforded useful employment opportunities, including self-employment, for those able, willing and seeking to work and to promote maximum employment production and purchasing power.

12. Bringing together expeditiously workers who require employment and employers who require workers by providing and assuring the full use of such free public facilities as may be needed to obtain jobs for workers and workers jobs and by facilitating the mobility of labour and encouraging and guiding necessary migration of workers between geographical areas and necessary shifts of workers across occupational and industrial lines.

13. Assistance in achieving maximum continuity and productivity of employment by placing workers in jobs for which they are suited and providing them with help in occupational adjustment when necessary, providing other agencies and organisations with practices and techniques evolved by the employment service for analysing actual or potential occupational qualifications and relating them to current or anticipated employment opportunities, and assisting employers to resolve employment problems.

14. Participation in cooperative action for the solution of employment problems by analysing, interpreting, and disseminating labour market information, collaborating with individuals, organisations, schools, and other government agencies in the use of such information in local, state and national planning for increased employment and economic activity, and assisting in the effective administration of unemployment compensation and readjustment allowances by providing placement and employment counselling services for claimants.

#### **Working procedure :**

The procedure followed by the USES are based on policy statements issued by the Government from time to time. The procedures followed in some of the specific phases of the employment service are as follows :—

(1) Necessary information is obtained about qualifications, skills, aptitudes, experience and training of the job seekers. Thereafter the job seekers are referred to the prospective employers. It is ensured that the applicants referred to the employers are provided employment on the wages and for hours of work and other conditions of work which are not less favourable than the working conditions in other localities.

#### **(2) Clearance :**

The USES facilitates the mobility of labour across geographical areas and occupational industrial categories by giving them encouragement and guidance. However, before resorting to clearance of workers, efforts are made to recruit qualified workers from all possible local sources. Before inter-State clearance, it is ensured that the minimum compensation is paid by the employers.

### **Employment counselling :**

The USES provides guidance and renders assistance to all applicants of employable age in regard to the training courses available and other facilities for broadening their aptitude and interest in their field of specialisation.

### **Service to Youth :**

The employment of youth entering the labour market presents difficulties due to lack of experience. The USES encourages the employers to employ fresh entrants on the basis of qualifications only.

### **Industrial service :**

The USES cooperates with the interested employers, workers, educational and training organisations, Government agencies and community groups for exchange of information. However, it refrains from participation or involvement in wage disputes or bargaining agreements.

### **Foreign labour :**

The USES provides for the recruitment of foreign workers for employment in the United States and for the recruitment of American workers for employment in foreign countries only when such recruitment is in accordance with the provisions of an agreement or arrangement between the United States Government and the foreign government or when such recruitment of American workers is for employment by the United States in the foreign countries.



## APPENDIX- XIV

### Manpower Planning in Great Britain

The Government of Great Britain has accepted as one of their primary aims and responsibilities the maintenance of a high and stable level of employment. The Minister of Labour & National Service is responsible to the Parliament for the manpower policies and programmes. The Minister is assisted and advised by his permanent secretary on the formulation of policy. The Ministry has the following departments each under an Assistant Secretary to deal with different aspects of the manpower problem.

#### 1. Employment policy :

It deals with manpower question connected with full employment policy, employment aspects of distribution of industry policy, surveys of employment and preparation of manpower studies; resettlement of ex-army personnel.

#### 2. Employment service :

(a) Exchange service; development and general planning policy of employment exchanges service; miscellaneous employment schemes; labour supply policy for particular industries.

(b) Appointment service, filling posts of senior executive, technical or scientific nature, including the nursing service; administering training schemes for persons in their fields, giving career's advice.

#### 3. Industrial relations :

Prevention and settlement of industrial disputes, including assistance to industry in establishing voluntary negotiating machinery, advice on joint consultation and personnel management in industry; administration of Wage Councils Act and Catering Wages Act.

#### 4. Military recruitment :

#### 5. Overseas :

British Govt. policy in connection with I.L.O. and other International Organisations on employment and settlement overseas, employment of foreigners in U.K. and liaison with Labour attaches and Labour Advisers Overseas.

6. Safety Health and Welfare of Workers and Factory Inspectorates.

7. Statistics.

8. Training.

9. Youth Employment and Disabled Persons.

There are regional offices each under a Controller of Assistant Secretary's rank for facilitating inter-departmental cooperation in the regions. Under these regional offices there are local offices—employment exchange, for registering the job seekers and placing them in suitable employment or arranging for their training; carrying out provisions of Disabled Persons (Employment) Act, 1944, arranging for transfer of workers, maintaining detailed employment and other records and preparing statistical returns, advising and assisting on problems of

workers welfare outside their places of employment, advising industrialists about the location of new enterprises from the labour point of view; vocational guidance and agency services for the Ministry of National Insurance and National Assistance Boards.

The Headquarters department formulates the policies in consultation with the regional officers.

At Headquarters there is inter-departmental consultation between the representatives of the Ministry of Labour and National Service, Board of Trade, Ministry of Housing and Local Government, Ministry of Works, Ministry of Agriculture and Fisheries, and other departments to decide matters relating to distribution of industries and physical planning. The Ministry of Labour advises on questions of labour supply and demand and undertakes research work in collaboration with other departments.

The Ministry compile employment information, e.g., employment situation and trend, gainfully occupied population, number of unemployed persons, monthly estimates of employment, labour supply and demand in different industries and circulate it to Government agencies, employers and their organisations, applicants for employment, trade unions and to public through its periodicals.

The Ministry renders special service to youth. The officers of the Ministry of Labour and Ministry of Education man the Central Youth Employment Executive. Special service is also rendered to disabled persons, older workers, ex-army personnel, etc., professional, senior executive and technical workers. The Ministry maintains the technical and scientific register and provide technical experts for under-developed countries overseas. The Employment Service has special arrangement for recruiting workers for agriculture, regular and seasonal works, merchant seamen, dock labour, building trades, coal mine, domestic service, hotels and restaurants.

The Employment Service prepares forecasts of manpower resources for several years and estimates probable distribution of manpower in the main industry groups in the light of the current and prospective economic policies. It assesses the probable effect of proposed economic policies on employment situation and ensures that the economic plans and programmes of industrial production are not beyond and equally are not too small for the manpower resources. It advises the Government in respect of full employment planning, mobility of labour, vocational training, location and distribution of industry, capital investment, unemployment benefit and national assistance, housing and provision of social amenities and international migration.

The Ministry of Labour is assisted by the following Advisory Committees :

1. *National Joint Advisory Council* having representatives of the Government employers confederation, trade unions and nationalised industries. The Council advises on matters in which employers and workers have common interest.

*2. Women's consultative committee :*

The Committee advises the Minister on matters of employment policy affecting women.

3. *Local Advisory Committees* consisting of three sections, an employer's panel, a worker's panel and additional member panel. These Committees are purely advisory. Their main task is to keep the employment situation under constant review. Advisory Committees are also for special categories of workers—youth, handicapped workers, disablement problems, etc.

The research work done in the Ministry is shared between a special branch of the Employment Policy Department and of the Statistics Department. The Manpower Branch compiles it and the Economic Policy Department supplies detailed information to the Government and public based on the data thus provided.



## APPENDIX-XV

### Manpower Planning Machinery in Canada

The Canadian Government has accepted the basic principles of an active manpower policy as :—

- (i) Manpower policy should ensure an effective development of manpower resources to meet the dynamic requirements of a growth in the economy and also to meet the needs of each individual for the full development of his potential in human terms.
- (ii) Employment policy should aim at a high level productive and freely chosen employment which should be continuous and sustained so that the seasonal and cyclical fluctuations are moderated.

The Federal Minister of Labour is the Cabinet Officer responsible for appraising manpower and related social needs for formulating policy and programmes and for representing the considerations of manpower policy in government's discussions of economic and other national policies and programmes. The Minister played a key role in the formulation of Government's economic programmes. The Federal Department of Labour performs a crucial role of stimulation, technical support, standards development and leadership in the areas where provinces have primary responsibility, e.g., vocational and technical training. The Department plays a significant role in defining the areas in which new enterprises or production facilities can qualify for grants or tax concessions by locating within them. The Department is responsible for achieving the integration and coordination of manpower and employment research.

Government research on manpower problems is carried out largely by the Economics and Research Branch of the Department of Labour. It carries out a variety of continuing surveys and analysis of labour problem. The activities of Economics and Research Branch cover a wide field. Research on technological changes is coordinated through an Advisory Committee on Technological changes representing government, universities, management and unions. There is a skilled Manpower Research Committee and an inter-departmental Committee within the federal government to direct such research. From time to time, special research programmes are taken up jointly by the federal and provincial governments on specific labour problems of provincial and national interest. At provincial level the coordination is done by a Committee of Canadian Association of Administrators of Labour Legislation which meets twice a year to discuss and recommend the new statistical series to be developed and avoid overlapping surveys. The Economics and Research Branch also reviews and assesses the existing programmes.

The Labour Department has organised a Manpower Consultative Service to provide finances for research and development of plans and funds to aid in geographical mobility.

The most important organisation under the Federal Department of Labour is the National Employment Service. Its functions are as follows :—

- (i) To provide free employment services to employers and employable workers.

- (ii) To aim at the best possible organisations of the employment market and the best use of manpower. It provides, in addition to a regular employment service, special services for special categories of applicants, including young persons who have not become established in industrial life, adults needing training, retraining or further training because of the effects of technological changes or occupational maladjustments, older workers, faced with arbitrary barriers to employment because of age alone and competent workers who suffer from physical or other handicaps. Special Service Division of the National Employment Service provides counsel according to the needs of the applicant. The local offices of the Service are equipped with general aptitude test battery for the purpose.

Under Convention 88 and the Unemployment Insurance Act and Regulation, the National Employment Service is obliged to (i) provide an organisation to assist workers in finding suitable employment; (ii) to collect labour market information concerning employment and to assist workers in obtaining a suitable employment; (iii) to assist employers in getting workers most suitable to their needs.

The National Employment Service in conjunction with the Department of Labour publishes statistical data on employment and unemployment arising from local office operations and makes them available to the public, Government offices, employers, workers' organisations and other bodies interested in employment situations.

The NSS has a network of 200 local offices spread all over Canada. In these local offices, certain officers specialise in various industry groups. The specialists study the industry and the employment trends. Liaison is maintained with workers and employees organisations and with other public and private bodies. The NES has the benefit of advice and assistance from the National Employment Committee and regional and local committees having representatives of labour and employees organisations and other bodies.

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## APPENDIX-XVI

### Tariff Commission

#### I. Functions :

- (i) To investigate into the claims of industries to protection and keep a continuous watch on the progress of protected industries;
- (ii) To investigate and enquire into and make recommendations on the manner, in which protection in relation to any industry has been working, with special reference to the conditions that might have been imposed on the protected industry;
- (iii) To collect, study and analyse employment and other data (*e.g.* capacity and capacity utilization, production, sales, stocks, prices, etc.) in respect of protected industries; and
- (iv) To determine fair prices for such of the products whether protected or not, as are referred to the Commission by Government.

#### II. Organisation at the headquarters :

(i) According to the Tariff Commission Act, the Commission may have three to five whole time members including the Chairman, who are men of standing and who have shown capacity in dealing with problems relating to commerce or industry, or in administration or who have special knowledge in any matter as renders them suitable for appointment on the Commission. There is a permanent Secretary to the Commission.

(ii) The Commission has four Divisions, *i.e.*, Investigation Division, Review and Research Division, Cost Accounts Division and Administration Division. The first two Divisions have two Directors and seven Assistant Directors, while the rest two have Senior and Junior Cost Accounts Officers and an Administrative Officer. There are also two Technical Directors, one for Chemicals and the other for Engineering and Metallurgy. The Divisions are under the immediate charge of the Superintendents. Senior Economic Investigators (6), Junior Economic Investigators (10), Draughtsman (1), Technical Assistants (1), UDCs and LDCs man the respective Divisions.

#### III. Organisation in the field :

The Commission does not have any field organisation, but field surveys are organised as and when necessary.

#### IV. Procedure of work :

As soon as a reference, whether for grant of protection or fixation of selling prices is received, basic data for the purpose of the enquiry are collected,

representative cost sample designed, wherever necessary, questionnaires framed and issued to all concerned. Views and suggestions of experts, Research Institutes as well as the concerned Departments, State/Central Governments are also obtained. Costs of productions of selected units are examined by the Commission's Cost Accounts Officers. A public inquiry is held to which representatives of various interests are invited. Cost data are scrutinised and detailed discussions held with representatives of Costed units.

#### V. Analytical studies :

Quarterly and Annual Reviews of protected industries are brought out regularly, besides submission of reports relating to enquiries entrusted to the Commission from time to time.



## APPENDIX – XVII

### Monopolies and Restrictive Trade Practices Commission

#### Organisation at the headquarters :

The Commission has membership of not less than three and not exceeding nine including the Chairman. The Commission has the following sanctioned strength of officers in its various wings :

##### 1. Administration :

Secretary

Deputy Secretary (1)

Administrative Officer (1)

Librarian (1)

##### 2. Research & technical :

Directors (2)

Joint Directors (4)

Deputy Directors (4)

Assistant Directors (8)

##### 3. Investigation :

Director (1)

Joint Director (1)

Assistant Director (1)

##### 4. Restrictive trade agreements : वित्त संघर्ष

Registrar (1)

Joint Registrar (1)

Deputy Registrar (1)

Assistant Registrars (3).

#### Functions :

(i) To ensure that the operation of the economic system does not result in the concentration of economic power to the common detriment to control monopolies and to prohibit such monopolistic and restrictive trade practices as are prejudicial to the public interest.

(ii) The functions of the Commission are advisory, 'original' and judicial in nature.

(iii) It renders advisory assistance to the Central Government on matters like proposed substantial expansion of activities of an undertaking, establishment of a new undertaking, merger or amalgamation schemes covered under Chapter III of the Act referred to it by the Central Government. It conducts enquiry into the monopolistic trade practices relating to goods or services of cases covered under Section 31 of the Act on a reference from Central Government. It enquires either at its own initiative

or on

reference into monopolistic restrictive trade practices and other related matters and submits its findings to the Central Government for consideration. It makes regulations for efficient performance of its functions under the Act.



## APPENDIX-XVIII

### Agricultural Prices Commission

#### 1. Functions :

- (i) To advise on the price policy for agricultural commodities with a view to evolving a balanced and integrated price structure in the perspective of the overall needs of the economy and with due regard to the interests of the producer and the consumer.
- (ii) To suggest such non-price measures as would facilitate the achievement of the above objective as also to make the price policy effective in respect of different agricultural commodities.
- (iii) To examine the prevailing methods and cost of marketing of agricultural commodities and suggest measures to reduce the cost of marketing and recommend fair price margins.

#### 2. Organisation at the headquarters :

The Commission comprises a Chairman, a Member and a Member-Secretary.

Technical staff attached to the Commission consists of one Director, three Joint Directors, One Deputy Director, and Five Assistant Directors with supporting technical and other staff.

#### 3. Procedure of work :

The Commission relies on technical data collected by the Directorate of Economics and Statistics, Department of Food, Food Corporation of India, Directorate of Sugar and Vanaspati, Textile Commissioner, Jute Commissioner, Cotton and Jute Corporation of India, Forward Markets Commission, various Commodity Development Directorates of the Department of Agriculture, State Trading Corporation of India, Ministry of Foreign Trade and State Governments. The Commission also calls for data and information from private organisations and Universities.

The Commission holds discussions with various interests, including Central and State Government Officials, Economists, growers and traders. It visits research institutions and farms as and when necessary. A Panel of Farmers constituted by the Ministry of Agriculture advises the Commission from time to time.

The Commission submits its recommendations to the Government for further action.